Master Thesis

Menu Mediums: Understanding the Influence of Physical Characteristics of a Restaurant Menu to Customers

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by
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Menu Mediums: Understanding the Influence of Physical Characteristics of a Restaurant Menu to Customers

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Abstract

A restaurant menu is a key tool in determining the success of the restaurant's sales. Several studies such as menu item position, menu item description, menu item label and menu graphics have shown results that the menu design can have an impact on the order-behavior of customers. Several theoretical foundations are used in this study specifically the Meal Experience, Menu Psychology, Menu Management and Menu Design. In this thesis, A quantitative research will be implemented basing the physical attributes of a menu, namely weight, size, material quality of the menu cover, and its ease of access, and look if there will be any influence on customer's perception of dish quality and expected price range. Additionally, this thesis also studies if the physical characteristics of a menu can influence the average check of a customer. The study can further increase the understanding that several factors can affect consumer behavior based on their pre-conceived idea and physical environment of the restaurant.

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Foreword

I would like to initially thank my adviser, Professor Kai Victor Hansen of University of Stavanger for his guidance and support throughout this project. I would have never been able to finish and go to the next steps without him. He is always available for my questions and he was positive and gave generously of his time and vast knowledge. Also, I would like to thank Professor Torvald Øgaard, he showed me the road and helped to get me started on the path to my thesis.

I am grateful for all of the guidance and assistance that were provided by Mme. Martine Ferry and Mr. Jeffrey Catrett of Institut Paul Bocuse, and Professor Johanna Rajakangas-Tolsa of Haaga-Helia University. Without your knowledge, help, and inspiration, this achievement would have never been possible.

I wish to express my sincere thanks to my parents, Teresita Millano and Porferio Millano, for helping me finance the degree and for being the best parents in the world and supporting me throughout my life. Last but not least, I would like to show my gratitude to all the participants in my study, those who accepted my permission to conduct a study in their place, and all my dearest friends and family.

Chapter 1: Introduction

Menus are probably one of the most important tools in any foodservice establishment. Because of this, the academic interest of restaurant menus seems to be rising. It is suggested that menus are not only professional speakers (Bowen & Morris, 1995), but also a piece of literature (Kreck, 1984). Moreover, the menu can have a significant increase of customer's perception of the restaurant's quality (McCall & Lynn, 2008) which can ultimately guide the customer's attention to the dishes which the restaurant wants to sell (Kwong, 2005), thus increasing restaurant profit (Seaberg, 1991).

Because menus are a key factor for business strategies (Marković, Raspor, & Šegarić, 2010), several restaurateurs changed the way they design their menus depending on their theme and positioning. Numerous research has been done with relation to the menu's design that can influence the choice of the customer and also the perceived quality and price. In particular, these existing studies mainly focused on four dimensions (Ozdemir & Caliskan, 2015); menu item position (Dayan & Bar-Hillel, 2011), menu item description (McCall & Lynn, 2008; Shoemaker, Dawson, & Johnson, 2005), menu item label (Guéguen & Jacob, 2012; Lockyer, 2006; Wansink, Painter, & Van Ittersum, 2001), and menu card characteristics (Choi, Lee, & Mok, 2010; Guéguen, Jacob, & Ardiccioni, 2012; Magnini & Kim, 2016; Reynolds, Merritt, & Pinckney, 2005). However even though these studies exist, there is a lack of academic research in the area of the physical characteristics of a menu. Thus, this research aims to test the influence of the menu's weight, size, and material quality on consumer's perception in restaurant quality and price range. These attributes were claimed in this research because they are easy to manipulate and has low-cost changes.

To achieve the intended purpose of this thesis, this problem statements were made. This aims to integrate theories and models from diverse disciplines into a framework that describes how a menu design can affect the consumer's perception. This framework is anchored in the atmospherics and meal experience research, (Bitner, 1992; Gustafsson, Öström, Johansson, & Mossberg, 2006; Hansen, Jensen, & Gustafsson, 2005) and also draws together menu psychology (Jang & Namkung, 2009; Zhang & Li, 2012) and converge into menu management (Ozdemir & Caliskan, 2014), and ultimately, menu design of card characteristics. Finally, the linkages between the framework is examined, and key research implications and limitations are discussed. The following bullets are the research questions that will be based on the thesis, the hypotheses of each research questions will be followed in Chapter 3:

- Research Question 1: How does the physical characteristics of a menu can influence the customer's perception to a dish's quality and expected price?

- Research Question 2: How does the menu medium affect the likelihood of selection of a dish to a customer?

Chapter 2: Literature Review a Description of the Bases

Meal Experience: Atmospherics, Servicecapes and the FAMM Model.

Certainly, the atmosphere of the whole restaurant is taken into consideration by restaurateurs, marketing experts, managers and organizational behaviorists. The overall physical surroundings with regards to design, décor elements and ambiance can affect the senses of the customer and can affect their behavior. It is a way of communicating the company's image and branding, which can help with the whole experience of both the customer and employee. The term 'atmospherics' was introduced by (Kotler, 1973) and described it as the effect of a physical stimuli on consumer behavior that can enhance the chance of purchase. Ever since then marketing professionals have gained interest on it because it can have a considerable effect on meal experience, consumer retention and satisfaction (Ryu & Han, 2011). Interestingly, Bitner (1992) has adapted this atmospherics into service-based organizations and has put a conceptual framework to it. He suggested that the 'physical setting can aid or hinder the accomplishment of both internal organizational goals and external marketing goals'. Gustafsson (2004) then came up with the theory of the Five Aspects Meal Model, a tool that can help give status to the different factors of the meal experience; room, meeting, products, management control system and the atmosphere. This was then further studied on by Hansen & Gustafsson (2005) by further detailing the model to generate the importance of customer's meal experience. The menu was then suggested by Ozdemir and Caliskan (2014) that it can have primary implications for the core component of the meal experience.

Menu Psychology: SOR Model, Grounded Cognition and Perception of Quality and Price

Some studies with regards to menu design has suggested that (Mehrabian & Russell, 1974) stimuli-organism-reaction or SOR model can be associated with menu psychology. They have theorized that an environmental stimulus can influence an individual's emotional state. Furthermore, several stimuli can have different roles in the service setting. Following the base of atmospherics and the FAMM model, the menu can theoretically be a stimulus that can affect cognitive reasoning of a consumer. Which can be an important predictor of emotional responses and future behaviors (Kivela, 1994). For example, if the menu used has a more expensive material like leather, fabric, book cloth, wood and metal, and compared to cheap materials like plastic and paper, this can be the stimuli that can activate the customer's perception on what the restaurant's price range is. Guéguen et al. (2012) have used the model to discuss the behavioral response of putting visual cues to the menu and has resulted to a positive relation between menu design and menu item choice.

The idea of grounded cognition suggests that visual and haptic cues can influence the perception of individuals (Barsalou, 2008). This was later anchored by Magnini (2016). In his research with regards to the menu's weight can affect the customer's perception to a restaurant's level of quality. This was based on research that proposes that carrying weight can influence psychological judgement mainly because carrying heavier objects takes more mental effort in which we can associate it to quality (Jostmann, Lakens, & Schubert, 2009; Zhang & Li, 2012). This can be also utilized in a different context with size and the material quality of the menu. Another research has posited that visual cues passed through physical packaging can help customers assess the brand's value (Lightfoot & Gerstman, 1998; Underwood, 2003). In which

packaging and menu can be relative to each other mainly because different aspects of product packaging design can also affect customer perception on brand quality, value and preference (Wang, 2013).

Consumer perceptions of quality and price is very important to managers, marketing experts and researchers. By definition, perceived quality is the consumer's judgement about a product's overall excellence and superiority (Zeithaml, 1988). Consumers see that appearance and durability is one of the key factors that determine quality (Morgan, 1985). Furthermore, attributes of a product that changes the consumer's perception of quality has been divided into two parts: intrinsic cues and extrinsic cues (Olson, 1976; Olson & Jacoby, 1972). Intrinsic attributes are the physical composition of a product as well as the packaging. On the other hand, the extrinsic attributes are that of outside the product, but is still related to it. Brand name, price, fame and advertising are examples of extrinsic attributes to quality. Additionally, Olson (1978) has pointed out that consumers may utilize information signals as stimuli to develop perceptions about products and that the response (i.e. choice or evaluation) may be a direct effect of these mediating beliefs.

Jacoby & Olson (1977) has distinguished that perceived price is the price as encoded by the consumer. Furthermore, Consumers do not usually recall the real cost of an item. Rather, they mentally encode prices in ways that are important to them. For example, a numerical price of $20 can be encoded as 'cheap' or 'expensive' rather than its numerical value. Overall, a research by Dodds et al. (1991) has concluded that price has a positive relationship with perceived quality. Additionally, Urbany et al. (1997) discovered that perceived price influences purchase intention only when they are sure about the product's quality.

Menu Management

In this recent review of literature, Ozdemir and Caliskan (2014) has established several menu management issues that is relating to the theoretical underpinnings of a menu. He described and identified five different issues that can be further studied and can be a basis to future research; menu planning, menu pricing, menu analysis, menu operating and menu design. Each issue has a substantial body of literature that is respected in their own ways.

Menu planning is the process of creating a menu item that encompasses raw material selection, menu item innovation, idea generation, dish concept development, implementation and evaluation. It aims to have the optimal generation of composition of food to satisfy both the customers and restaurant firms expectations. Menu pricing, in its own words, works with the price perception of customers, price elasticity, sensitivity and pricing methods. Menu operating covers the operating side of recreating a dish and the cost of that dish, which includes labor, time, raw materials, and space. It mainly involves around the production of the menu items, cost control, food hygiene practices and also its service processes. Menu analyzing, is made with the terms of the restaurant's financial goals, this reveals the analysis of each menu item and its financial performance that indicates its profitability, popularity, and costs. Which can then be further improved by using progressive strategies like recipe modification, repricing, re-costing, and promotion. Menu design is then described as the design of the whole menu card which includes; menu item layout and position, menu item description, menu item labeling, and menu card characteristics.

Menu Design

Menu design can be as important as the other menu management issues stated above. The key factors of the design aspect of the menu are the positioning of the menu items, how the menu item is labeled, the definition of the said menu item, and of course, the menu card itself. It has been studied a lot by researchers with the aim of influencing the customer's behavior towards the item choice. Mainly, trying to lead the customer's attention to the dishes which the operator wants to sell unconsciously can be an advantage as it can impact the profitability of the whole restaurant (Kwong, 2005; Panitz, 2000).

Menu item position is based on the location of the menu item in the menu. two studies has been conducted and has a positive effect with regards to the position of the menu item (Dayan & Bar-Hillel, 2011; Sobol & Barry, 1980). However, there are other research that indicated no relation of menu item's position to item sales (Bowen & Morris, 1995; Kincaid & Corsun, 2003; Reynolds et al., 2005). Additionally, theoretical explanation by Choi et al. (2010) and Yang (2012) says that menus have a 'sweet spot' that can generate more item orders that are on that spot, basing on the gaze motion theory. This theory has different influence on item choice based on different kind of menu book or card that has a varying number of pages or folds respectively. Alternatively, menu item description contains the details of the menu item which includes nutritional information, geographical information, preparation information, and of course, a play of complex words. It was shown by Hwang and Lorenzen (2008) that nutritional information is desired by customers, which can make customers choose a healthier choice. A play on words by putting complex terminologies in preparing the dish, also putting geographical locations can have a positive effect on menu item sales (McCall & Lynn, 2008). This detailed information can negate

the impact of alienating your customers when you increase your price (Shoemaker et al., 2005). A study (Mackison, Wrieden, & Anderson, 2009) reports that consumers welcome this said information, as it makes it easier for consumers to make a decision when having informed choices. However, menu descriptions are expected to be accurate in the dish presentation (Hartwell & Edwards, 2009). In another area, menu labeling is the art of naming the menu item with evocative labels, which can blend into a positive reaction of what is to come (Lockyer, 2006). Item sales can be increased when comparing regular named menu items to evocatively named menu items (Wansink et al., 2001; Wansink, van Ittersum, & Painter, 2005). Comparing to menu item description, putting geographic, affective and brand labels can also lead to increased sales (Guéguen & Jacob, 2012).

Menu card characteristics have been classified by Ozdemir & Caliskan (2015) that features the menu card's physical characteristics such as color, material, font, size, and the use of pictures and boxes. However, two additional things like weight and number of folds and pages are part of the menu characteristics and should be considered to this thesis. Using different styles of typeface, color and weight can affect perceived company scale and service quality (Hensdill, 1998; Kotschevar, 1987; Magnini & Kim, 2016). With regards to size, Sheridan (2001) has suggested that it should be proportionate to the table size, soil and water resistant, and should complement the branding and positioning of the restaurant. With the use of pictures, it has been largely studied by researchers and found that it has a positive effect in increasing item sales (Guéguen et al., 2012; Hou, Yang, & Sun, 2017). But, the use of boxes fails to increase the sales of a menu item (Reynolds et al., 2005). With regards to material, weight, size and number of folds or pages, there is limited

research indicating their importance. This thesis will aim on how will it affect customer's perception in restaurant quality and price range.

Theoretical Model

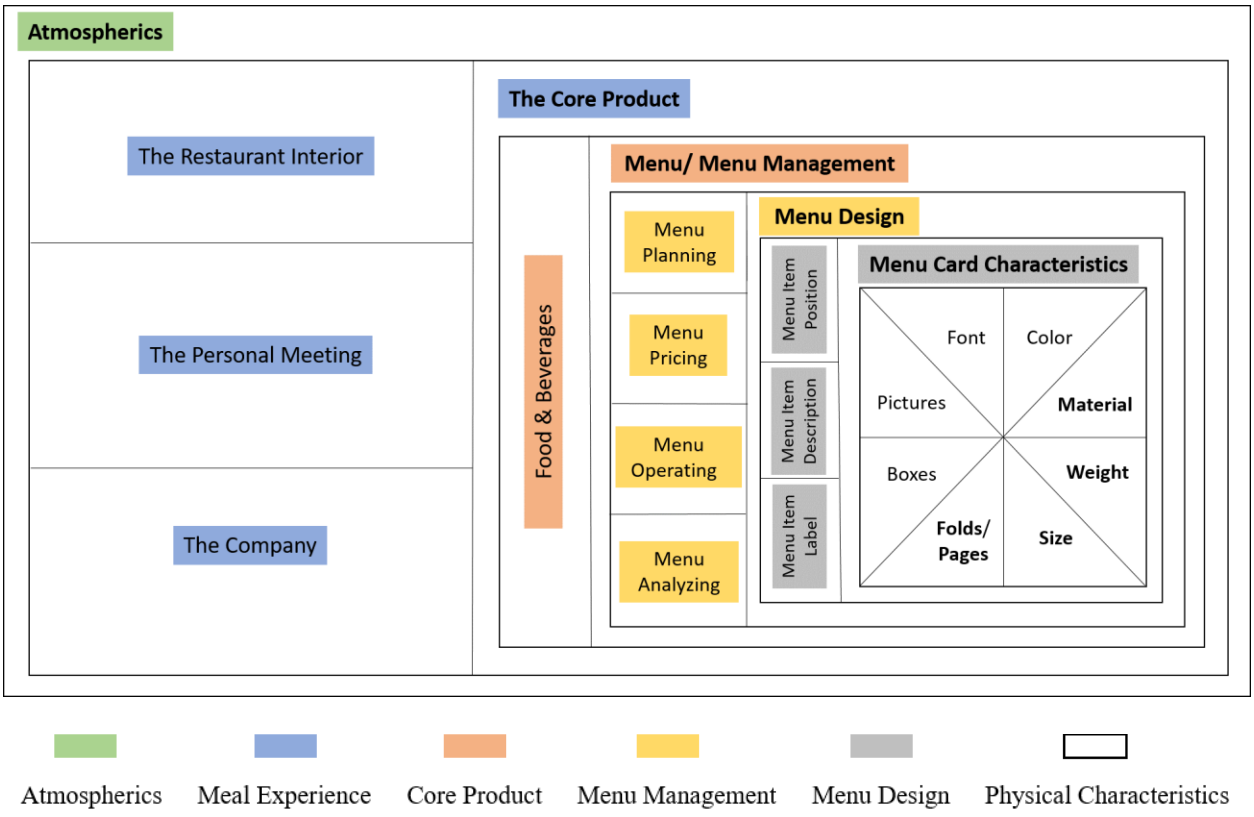

Figure 1: Theoretical Model based on FAMM model and Menu Management Issues

The FAMM model by Hansen et al. (2005) and Gustafsson et al. (2006) and the menu management issues by Ozdemir & Caliskan (2014) are the basis of this theoretical framework. Administrative nature of the management control system encompasses the whole atmospherics or servicescape of the foodservice organization and then converges to the menu design and card characteristics wherein the factors are laid out. The menu management issues stated above can be integrated to the FAMM model, which can be under the core product of the foodservice organization as stated by Ozdemir and Caliskan (2015).

Figure 1 has words in bold letters as well as layered in different colors. This means that the bolded terminologies are tackled in this research paper, and converges from the macro setting, Atmospherics, down to the micro details such as the menu card characteristics. There are six layers of the model, the first one, Atmospherics, introduced by Kotler (1973), highlighted in green, encompasses the whole environment of the restaurant. The second layer, highlighted in blue, are the factors that affects the meal experience of a customer (Gustafsson, 2004). The FAMM is then given more detail by Hansen & Gustafsson (2005), putting the menu as a core product of a meal experience. Which leads us to the third layer, highlighted in orange. Under the third layer are the five different kinds of menu management issues, which is highlighted in yellow, that proposed by Ozdemir & Caliskan (2014). The fifth layer, highlighted in gray, are the categories of a menu design described by Ozdemir & Caliskan (2015). The last layer are the factors that give the menu a unique physical characteristic and layout. The bolded words in the inner-most layer are the dependent variables studied in this research paper.

For Figure 2, it is a connection that reflects the consumer behavior with regards to their perceived quality and perceived price. As mentioned earlier, Dodds et al. (1991) has concluded that price has a positive relationship with perceived quality. This conceptual model explains that the intrinsic attributes of a core product, which is the menu, can influence the perceived quality and perceived price of the items in the menu. Also, the positive sign tells that the perceived quality and perceived monetary price have a positive relation with each other.

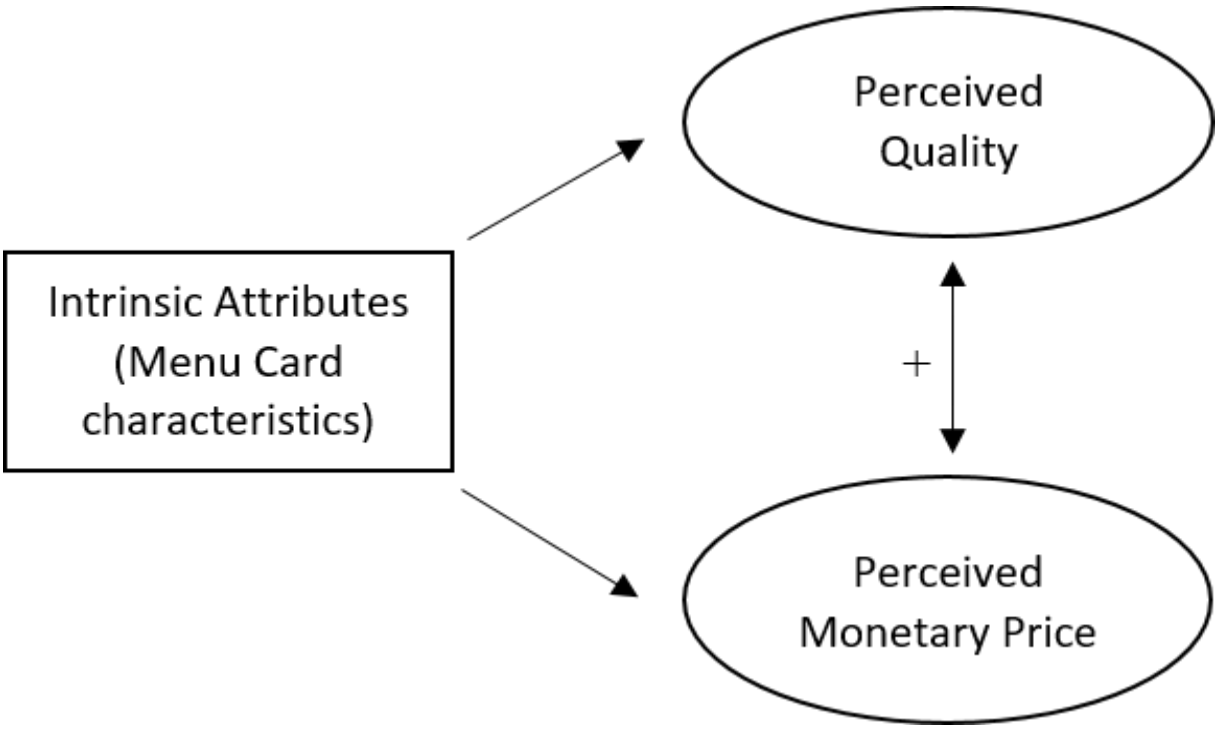

Figure 2: Conceptual model of the effect of menu card characteristics to perceived quality and perceived price

Figure 3 explains that the link between the perceived quality, price, value and choice of purchase can be explained in part by the objective price of the product. It is explained by Dodds et al. (1991) that consumers normally have a set range of prices that are acceptable to pay for a considered purchase. This can also mean that the objective price can influence the validity of the data. The perceived value in this conceptual model is derived from the quote 'value is the quality I get for the price I pay'. It is the tradeoff between what you 'pay' (price) and one 'get' component, which is quality (W. B. Dodds & Monroe, 1985; Doyle, 1984). The main difference of figure 2 and figure 3 is that without an objective price, which is the actual price of an item, there will be no possibility of a perceived value. Mainly because there is no price to be seen, thus no sale and no purchase. It is basically showing that if the consumer only sees the characteristics of a menu card, there will be perceived quality and perceived price, but no intention of purchasing.

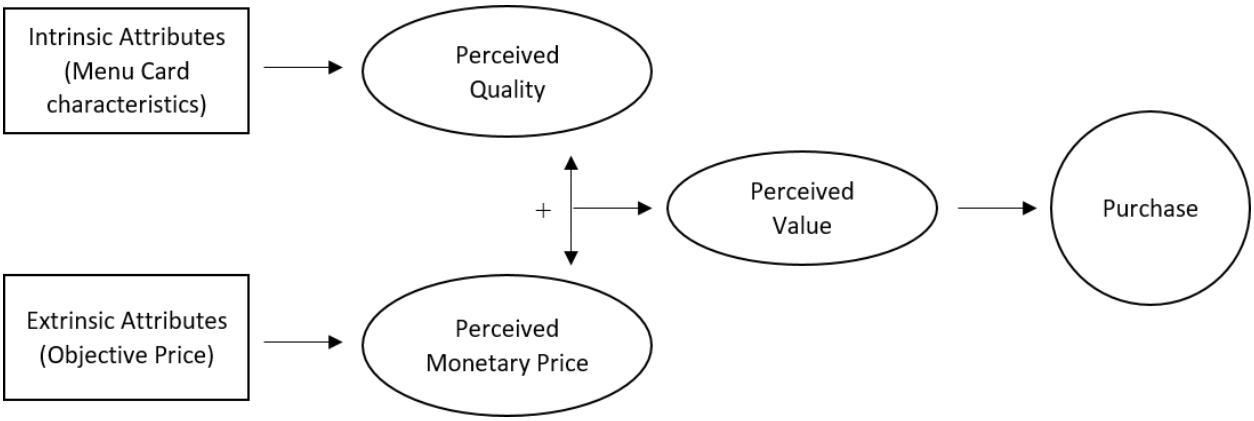

Figure 3: Conceptual model of the effect of menu card characteristics and objective price to perceived quality, price, value and purchase

These models have been created because all of it connects together. According to consumer behavior, there must be stimuli to lead an organism to a reaction. From the macro setting like atmospherics to the main micro details like menu card characteristics, there will be an effect of the cognitive reasoning of a consumer. It is also backed by grounded cognition that says that visual cues can affect a perception of a consumer. Furthermore, evaluations of consumers based only on intrinsic and extrinsic attributes can lead to quality, price, and value perception and ultimately affect their purchase behavior. Value perception and quality perception has been an interesting topic to marketing experts. When you can change the perception of a customer, then it is up to the manager to implement pricing strategies depending on the perceived quality of the consumers. Using these strategies can change the profitability of the restaurant. Several of the mentioned studies above have a positive claim that menu design can influence customer's choice of a menu item. Menu design is a multi-dimensional construct that can substantially affect consumer behavior. But since there is limited research to menu design, future research is encouraged, in my line of thesis, several factors were not included but can be further improved to future scholars.

Chapter 3: Methodology

Introduction

This chapter mainly discusses the research design and review again the research questions and its hypotheses. There are two experiments that will be conducted to answer the research questions. A preliminary experiment is made to determine the validity of the questionnaire that is used. The setting of the experiments is established and then the sample size is determined. This chapter will then discuss the approach used to the contact informants or respondents and how other information is collected. The instruments used will then be discourse in more detail and how the survey flow and staging instruments are used, the design of the menu that is printed and given to the respondents. After that, this chapter fully describes the data collection and the procedure of the experiments and the precise method of how the data were processed and then analyzed is then discussed.

Objectives

The aim of this paper is to know if there will be perceptual changes or influence to the pricing and dish quality, as well as the selection likelihood of a dish of a restaurant depending on the menu's physical properties such as weight, size & number of pages/folds, material quality, and its ease of access.

The data acquired should also be able to determine if there are correlation, reliability, and validity between the weight, size & number of pages/folds, material quality and ease of access of the menu. Distinct results should also be attained to determine if this research is substantial to the field of menu design and for future research.

Research Design

A quantitative approach to the research was adopted in the first and second experiment The first one is to answer research question one (RQ1), in which the respondents will answer a questionnaire after seeing the printed menus. The data will then be analyzed and discussed to answer research question one (RQ1) and to confirm its hypotheses. While on experiment 2, the respondents are the customers of IMÀ restaurant. The data recorded are the order of the customers based on the menu that were given to them to answer research question two (RQ2) and confirm its hypotheses.

The menu in this research will be based on IMÀ, a restaurant near the University of Santo Tomas, Manila, Philippines. The restaurant is a casual, full-service restaurant which caters to mostly students from the university. IMÀ made a perfect test area since its present menu was a basic, direct rundown of all dishes accessible for sale.

The menu design is categorized into three classes, a single page menu card, multiple paged folded menu, and a multiple paged book style menu. Each class of the menu will have two distinct differences, the menu weight and the material it is made of. For the single page menu card, a laminated menu card and a synthetic menu card is used. For the multiple paged folded menu, a folding synthetic paper and a folding leather-covered menu is used. For the multiple paged book style menu, a magazine style with synthetic paper and a leather bound menu book is used.

Independent Variables

In experiment 1 and 2, the independent variables are the physical characteristics of the menu such as the menu's heaviness (W): the weight of the menu; size & number of pages and folds (S): the dimension of the menu in proportion to the field of vision of the respondent; material quality (M): the standard of the material the menu is made out of; and ease of access (E): how easy it is to navigate through the menu.

Dependent Variables

In experiment 1, the dependent variables are the price perception (P): how cheap or expensive they think of the dishes of the menu; and the dish quality perception (DQ): what is their insight on how good is the quality of the dishes in the menu. While on experiment 2, the selection likelihood, the probability of choosing a certain price range of the menu, is the dependent variable.

Research Questions and Hypotheses

Research Question 1: How does the physical characteristics of a menu can influence the customer's perception to a dish's quality and expected price?

Hypothesis 1: The menu's weight can influence the customer's perception to a dish's quality and expected price.

Hypothesis 2: The menu's size, thickness and number of pages can influence the customer's perception to a dish's quality and expected price.

Hypothesis 3: The menu's quality of material can influence the customer's perception to a dish's quality and expected price.

Hypothesis 4: The menu's ease of access can influence the customer's perception to a dish's quality and expected price

Research Question 2: How does the menu medium affect the likelihood of selection of a dish to a customer?

Hypothesis 1: The menu's weight, size, quality material and ease of access and can affect the selection likelihood of dishes or the average check to a customer.

Experiment 1

Experiment 1 involved a survey type questionnaire to test the hypothesis that answers RQ1. In the questionnaire, a 7 point Likert type scale is used to measure the four independent variables. To answer the questionnaire, the respondents are given one of six different kinds of menus and told to look at the menu, review its material, and overall physical characteristics while the price is omitted. Correlation analysis, reliability and validity tests and factor analysis will be conducted using IBM SPSS Statistics 25.

Experiment 2

Experiment 2 involved in the second part of the questionnaire that answers RQ2, and is also handed out to the respondents who initially answered RQ1. They will be given one of six different kinds of menus with the price present. Their order will then be recorded as data to determine if the customer have chosen a different menu item of a certain price range, and to also record their check average is higher or lower when using a different kind of menu. A mean analysis will be used to determine the average order price of the respondents in each menu.

Setting and Participants

Setting

Experiment 1 and 2 received respondents in different areas of Metro Manila that is surrounded by casual restaurants such as malls and business districts. The target area must be where foot traffic volume is high and has a demographic of working families and students.

Eastwood is a commercial and residential area located in Quezon City, Philippines. Its demographics are more on the working class and also home to middle to high income earning families or individuals. Bonifacio Global City or 'BGC' is a financial and lifestyle district in Taguig City, Philippines. It is home to luxury condominiums and high-end hotels and restaurants can be found here. The demographics are mostly high income earning families and individuals. Ayala Center, the center for business, shopping, dining and entertainment, is a major commercial development center in Makati City, Philippines. It is also home to several well-known hotel brands and fine dining, casual and modern restaurants. Middle income to high income families work and live here. Lastly, University of Santo Tomas, is a Roman Catholic, royal and pontifical research university in the Philippines. Its students come from a background of low to medium earning income families. (See Appendix A)

Sampling Size and Determination

The sample size calculation and determination in this study were based on one method. According to the Nielsen Foodie Report (2017), Metro Manila residents choose to dine-out twice a day. The findings are based on interviews and focused group discussions conducted in June and July 2017 among Metro Manila respondents aged 16-50. The respondents come from socioeconomic Classes ABCD and are considered "purchase decision makers."

The population of Metro Manila is 12.8 million (Philippine Statistics Authority, 2015). Hence, based on a 95% confidence level with 1.96 z-score (z), ±5% margin errors (e) and 12.8 million of population size (N), the ideal sample size was calculated as 385 using the equation

$$\text{"Sample Size} = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1+\left(\frac{z^2 \times p(1-p)}{e^2 N}\right)} \text{"}$$

with an additional of 5 respondents for it to be divisible by six kinds of menu. The total sample size is 390 respondents, with each of the six menus have 65 respondents.

Data Collection

Participants were verbally recruited or an ambush type of data collection is implemented. Wherein people who were sitting down and waiting is asked if they have a spare time to answer a one-page questionnaire. To balance the male and female sample and to save time and energy, couples and groups of people of mixed gender were usually asked to answer the survey. If approval is granted, participants will complete the survey after approaching them. The surveys were given out during the hours of 5pm to 10pm from the 26th of March 2018 until the 8th of May 2018. The survey process should take no longer than 3-5 minutes for each participant. The survey results are then pooled for the thesis project and individual results of the study will remain absolutely confidential and anonymous. No costs were incurred by either the owners of the land and the individual participants. The researcher then instructed the participant to read over the following instructions printed at the front of the survey. Table 1 is the breakdown of where and how many people answered the survey.

Menu Type	26-Mar	27-Mar	3-Apr	5-Apr	11-Apr	13-Apr	17-Apr	18-Apr	23-Apr	26-Apr	2-May	3-May	6-May	8-May	Total
M1T1	3	11	6	6	7	1	2	1	4	2	7	5	1	9	65
M1T2	3	11	7	6	6	3	2	1	4	2	5	5	3	7	65
M2T1	3	10	7	6	6	3	3	1	4	2	7	9	4	0	65
M2T2	4	11	5	6	7	2	3	4	4	2	4	8	5	0	65
M3T1	3	12	8	6	8	3	3	6	5	2	6	3	0	0	65
M3T2	0	0	11	6	4	1	5	2	4	2	5	2	4	19	65
Total	16	55	44	36	38	13	18	15	25	12	34	32	17	35	390
Place	Eastwood	BGC			Ayala				Eastwood		UST	UST	Ayala	BGC	

Table 1: Breakdown of how many respondents answered in each type of menu on column 1, and the place where the survey was conducted.

Measurements and Instrumentation

Questionnaire

The questionnaire will be given to bystanders to answer RQ1. The questions will be listed in a random sequence to avoid errors and to make the respondents attentive. There is no reverse scaling as the questionnaire is standardized and reverse questions makes it confusing to the respondent. The letters were added to be of convenience in working around IBM SPSS Statistics 25. (See Appendix A)

The instructions of the questionnaire are as follows:

- After reviewing the menu without seeing the prices, please spare a few minutes of your valuable time to answer this simple questionnaire. (Answers RQ1)
- After answering the questions above (For RQ1), you can now look at the menu with the price tags on and answer this question: (Answers RQ2).

A 7-point type Likert scale is implemented measuring the agreement (1 = strongly disagree, 4 = neither disagree nor agree, 7= strongly agree), quality perception (1 = extremely poor, 4 = fair, 7= excellent) and price perception (1 = very cheap, 4 = neutral, 7 = very expensive) response set in interval variables.

The indicators of the following independent variables are as follows:

Weight (W)

- (W1) I find the menu heavy and hard to raise. (agree – disagree)
- (W2) The menu is made of heavy materials. (agree – disagree)
- (W3) It is difficult to lift up the menu due to its weight. (agree – disagree)

Size, Pages and Folds (S)

- (S1) I find the dimensions of the menu pretty big. (agree – disagree)
- (S2) I find the menu's size bigger than my field of vision. (agree – disagree)
- (S3) I find the menu's folds/pages bulky. (agree – disagree)

Material Quality (Q)

- (Q1) I think that the covering and paper of the menu is made from ___ quality. (poor – excellent)
- (Q2) The menu cover is made from a ___ standard of material. (poor – excellent)
- (Q1) I find the menu materials is made from ___ quality. (poor – excellent)

Ease of Access (E)

- (E1) I find the menu relatively easy to navigate through the dishes. (agree – disagree)
- (E2) I didn't have a hard time looking around the menu items. (agree – disagree)
- (E3) Scanning through the menu items are easy and hassle-free. (agree – disagree)

Price Perception (P)

- (P1) I think that the average price of the menu is in the ___ scale (cheap – expensive)
- (P2) After seeing the menu, I think that the food is made from ___products/raw materials. (cheap – expensive)
- (P3) The menu made it look like the dishes were of ___ price range. (cheap – expensive)

Dish Quality Perception (DQ)

- (DQ1) I think that the food will be prepared with fresh and top quality products. (agree – disagree)
- (DQ2) After seeing the menu, I think that the food is prepared by ___ professional food handlers. (poor – excellent)
- (DQ3) I think that the standard of the dishes in the restaurant is of ___ quality. (poor – excellent)

Menu Design

The menu design will all be based on IMÀ's existing menu design. A new design was proposed to the owner to have a compatible design for this research. The color palette is brown and has a touch of wooden material. Pictures were provided by the owner. The prices were similar to the old menu. Item description is omitted to simplify the decision of the respondents. Color, borders used, font, prices, dish items, and pictures are all implemented to be the same to lessen the internal validity of the research. The only difference was the layout of the menu that goes with its weight, size and pages, ease of access and cover material. (See Appendix A)

There are three different layout of the menu, with each layout having two types of material covering that changes the weight and size. See Table 2 for the different kinds of menus used:

Menu Type	Layout Type	Weight	Size, Pages, Folds	Covering Material
M1T1	(1) Single panel, menu card	53g	A4, 2 pages	Laminated plastic
M1T2	(1) Single panel, menu card	104g	A4, 2 pages	Sticker on Sintra board
M2T1	(2) Three Panel, tri-fold menu	39g	A4, 6 pages, folded	170 GSM paper
M2T2	(2) Three Panel, tri-fold menu	343g	A4, 6 pages, folded	170 GSM paper on tri-fold leather cover
M3T1	(3) Four Panel, book style menu	66g	A4, 8 pages	170 GSM paper
M3T2	(3) Four Panel, book style menu	656g	A4, 8 pages	170 GSM paper on leather bound menu

Table 2: Physical characteristics of the menus used. There are 3 kinds of layout with each layout having 2 different physical characteristics.

Data Processing and Analysis

The data is then transcribed into Microsoft Excel and then exported to IBM SPSS Statistics 25. Several analysis techniques and processes are used to determine the statistical significance of the data. A Pearson correlation is used to determine the significance of the variables to each other. Reliability tests to understand the reliability of scales. Factor Analysis is then made to find items that co-varies strongly. The PCA or Principal Component Analysis looks at all the factors and relations among the components and will compare and weigh them differently to see if the factor's validity is converging.

Female	237	61%	Average Age	25	Working	232	59%
Male	148	38%	Median Age	23	Studying	124	32%
Empty	5	1%			Empty	34	9%
Total	390	100%			Total	390	100%

Table 3: Total number of respondents with their gender, age and occupation

The demographics of the data has a total size of 390 respondents for all menus. 61% of the respondents are female while 38% are male, and 5% omitted the answer. For the age, the average is 25 years old and has a median age of 23. 59% of the respondents were in the workforce while 32% are studying full-time, and 9% were either unemployed or did not put their occupation. See Table 3 for the demographics.

Correlation Analysis

A correlation analysis for M1T1 will be used to initially see if each of the independent variables are significant to each other.

Correlations

		(W1) I find the menu heavy and hard to raise	(W2)The menu is made of heavy materials	(W3) It is difficult to lift up the menu due to its weight
(W1) I find the menu heavy and hard to raise	Pearson Correlation	1	.219	.090
	Sig. (2-tailed)		.080	.475
	N	65	65	65
(W2)The menu is made of heavy materials	Pearson Correlation	.219	1	.277*
	Sig. (2-tailed)	.080		.025
	N	65	65	65
(W3) It is difficult to lift up the menu due to its weight	Pearson Correlation	.090	.277*	1
	Sig. (2-tailed)	.475	.025	
	N	65	65	65

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

Table 4: Weight (W) indicators' correlation to each other for M1T1.

Correlations

		(S1)I find the dimensions of the menu pretty big	(S2) I find the menu's size bigger than my field of vision	(S3) I find the menu's folds/pages bulky
(S1)I find the dimensions of the menu pretty big	Pearson Correlation	1	.400**	.240
	Sig. (2-tailed)		.001	.054
	N	65	65	65
(S2) I find the menu's size bigger than my field of vision	Pearson Correlation	.400**	1	.265*
	Sig. (2-tailed)	.001		.033
	N	65	65	65
(S3) I find the menu's folds/pages bulky	Pearson Correlation	.240	.265*	1
	Sig. (2-tailed)	.054	.033	
	N	65	65	65

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

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

Table 5: Size (S) indicators' correlation to each other for M1T1.

Correlations

		(Q1) I think that the covering and paper of the menu is made from (blank) quality	(Q2) The menu cover is made from a (blank) standard of material	(Q3) I find the menu materials is made from (blank) quality
(Q1) I think that the covering and paper of the menu is made from (blank) quality	Pearson Correlation	1	.499**	.383**
	Sig. (2-tailed)		.000	.002
	N	65	65	65
(Q2) The menu cover is made from a (blank) standard of material	Pearson Correlation	.499**	1	.532**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(Q3) I find the menu materials is made from (blank) quality	Pearson Correlation	.383**	.532**	1
	Sig. (2-tailed)	.002	.000	
	N	65	65	65

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

Table 6: Quality (Q) indicators' correlation to each other for M1T1.

Correlations

		(E1) I find the menu relatively easy to navigate through the dishes	(E2) I didn't have a hard time looking around the menu items	(E3) Scanning through the menu items are easy and hassle-free
(E1) I find the menu relatively easy to navigate through the dishes	Pearson Correlation	1	.434**	.627**
	Sig. (2-tailed)		.000	.000
	N	65	65	65
(E2) I didn't have a hard time looking around the menu items	Pearson Correlation	.434**	1	.547**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(E3) Scanning through the menu items are easy and hassle-free	Pearson Correlation	.627**	.547**	1
	Sig. (2-tailed)	.000	.000	
	N	65	65	65

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

Table 7: Ease of Access (E) indicators' correlation to each other for M1T1.

Correlations

		(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	(DQ3) I think that the standard of the dishes in the restaurant is of (blank) quality
(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	Pearson Correlation	1	.369**	.444**
	Sig. (2-tailed)		.002	.000
	N	65	65	65
(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	Pearson Correlation	.369**	1	.586**
	Sig. (2-tailed)	.002		.000
	N	65	65	65
(DQ3) I think that the standard of the dishes in the restaurant is of (blank)quality	Pearson Correlation	.444**	.586**	1
	Sig. (2-tailed)	.000	.000	
	N	65	65	65

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

Table 8: Dish Quality Perception (DQ) indicators' correlation to each other for M1T1.

Correlations

		(P1) I think that the average price of the menu is in the (blank) scale	(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	(P3) The menu made it look like the dishes were of (blank) price range
(P1) I think that the average price of the menu is in the (blank) scale	Pearson Correlation	1	.291*	.383**
	Sig. (2-tailed)		.019	.002
	N	65	65	65
(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	Pearson Correlation	.291*	1	.553**
	Sig. (2-tailed)	.019		.000
	N	65	65	65
(P3) The menu made it look like the dishes were of (blank) price range	Pearson Correlation	.383**	.553**	1
	Sig. (2-tailed)	.002	.000	
	N	65	65	65

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

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

Table 9: Price Perception (P) indicators' correlation to each other for M1T1.

This shows the correlation of each construct's indicators with one another. The magnitude of the significance is the second number in the middle and the number of respondents are the last number in the box. A precise positive correlation is a good sign to have to assume that each item is positively correlated with one another, and the significance level or p-value should not be more than 5%. If it is less than 5% the correlation is great and suggests that if each indicator's point goes up, then the other goes indicator of that construct goes up as well, or simply put, it is positively correlated with one another. (See Appendix B)

In the next sets of tables, the correlation analysis is then tested between each constructs, or the dependent and independent variables. This explains the relationship of the variables in each layout of menu, single panel, folding, and book style.

Correlations

		WEIGHT_M1T1	SIZE_M1T1	QUALITY_M1T1	EASE_M1T1	DISHQUALITY_M1T1	PRICE_M1T1
WEIGHT_M1T1	Pearson Correlation	1	.649**	.341**	.108	.177	.448**
	Sig. (2-tailed)		.000	.005	.390	.157	.000
	N	65	65	65	65	65	65
SIZE_M1T1	Pearson Correlation	.649**	1	.136	.087	.167	.287*
	Sig. (2-tailed)	.000		.281	.491	.182	.021
	N	65	65	65	65	65	65
QUALITY_M1T1	Pearson Correlation	.341**	.136	1	.242	.563**	.355**
	Sig. (2-tailed)	.005	.281		.053	.000	.004
	N	65	65	65	65	65	65
EASE_M1T1	Pearson Correlation	.108	.087	.242	1	.364**	.217
	Sig. (2-tailed)	.390	.491	.053		.003	.082
	N	65	65	65	65	65	65
DISHQUALITY_M1T1	Pearson Correlation	.177	.167	.563**	.364**	1	.436**
	Sig. (2-tailed)	.157	.182	.000	.003		.000
	N	65	65	65	65	65	65
PRICE_M1T1	Pearson Correlation	.448**	.287*	.355**	.217	.436**	1
	Sig. (2-tailed)	.000	.021	.004	.082	.000	
	N	65	65	65	65	65	65

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

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

Table 10: Correlation of variables of single panel laminated menu (M1T1)

Correlations

		WEIGHT_M1T2	SIZE_M1T2	QUALITY_M1T2	EASE_M1T2	PRICE_M1T2	DISHQUALITY_M1T2
WEIGHT_M1T2	Pearson Correlation	1	.515**	.011	-.243	.252*	.098
	Sig. (2-tailed)		.000	.930	.051	.042	.435
	N	65	65	65	65	65	65
SIZE_M1T2	Pearson Correlation	.515**	1	-.002	-.144	.391**	.098
	Sig. (2-tailed)	.000		.989	.253	.001	.439
	N	65	65	65	65	65	65
QUALITY_M1T2	Pearson Correlation	.011	-.002	1	.121	.173	.411**
	Sig. (2-tailed)	.930	.989		.337	.168	.001
	N	65	65	65	65	65	65
EASE_M1T2	Pearson Correlation	-.243	-.144	.121	1	-.080	.204
	Sig. (2-tailed)	.051	.253	.337		.529	.103
	N	65	65	65	65	65	65
PRICE_M1T2	Pearson Correlation	.252*	.391**	.173	-.080	1	.138
	Sig. (2-tailed)	.042	.001	.168	.529		.273
	N	65	65	65	65	65	65
DISHQUALITY_M1T2	Pearson Correlation	.098	.098	.411**	.204	.138	1
	Sig. (2-tailed)	.435	.439	.001	.103	.273	
	N	65	65	65	65	65	65

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

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

Table 11: Correlation of variables of single panel sintra board menu (M1T2)

Correlations

		WEIGHT_M2T1	SIZE_M2T1	QUALITY_M2T1	EASE_M2T1	DISHQUALITY_M2T1	PRICE_M2T1
WEIGHT_M2T1	Pearson Correlation	1	.512**	.052	-.045	.200	.230
	Sig. (2-tailed)		.000	.682	.722	.109	.066
	N	65	65	65	65	65	65
SIZE_M2T1	Pearson Correlation	.512**	1	.300*	.166	.351**	.296*
	Sig. (2-tailed)	.000		.015	.186	.004	.017
	N	65	65	65	65	65	65
QUALITY_M2T1	Pearson Correlation	.052	.300*	1	.474**	.730**	.388**
	Sig. (2-tailed)	.682	.015		.000	.000	.001
	N	65	65	65	65	65	65
EASE_M2T1	Pearson Correlation	-.045	.166	.474**	1	.532**	.317*
	Sig. (2-tailed)	.722	.186	.000		.000	.010
	N	65	65	65	65	65	65
DISHQUALITY_M2T1	Pearson Correlation	.200	.351**	.730**	.532**	1	.519**
	Sig. (2-tailed)	.109	.004	.000	.000		.000
	N	65	65	65	65	65	65
PRICE_M2T1	Pearson Correlation	.230	.296*	.388**	.317*	.519**	1
	Sig. (2-tailed)	.066	.017	.001	.010	.000	
	N	65	65	65	65	65	65

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

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

Table 12: Correlation of variables of a tri-fold paper menu (M2T1)

Correlations

		WEIGHT_M2T2	SIZE_M2T2	QUALITY_M2T2	EASE_M2T2	DISHQUALITY_M2T2	PRICE_M2T2
WEIGHT_M2T2	Pearson Correlation	1	.520**	-.032	-.185	.047	.060
	Sig. (2-tailed)		.000	.799	.139	.711	.633
	N	65	65	65	65	65	65
SIZE_M2T2	Pearson Correlation	.520**	1	-.090	-.154	.082	.074
	Sig. (2-tailed)	.000		.477	.220	.518	.557
	N	65	65	65	65	65	65
QUALITY_M2T2	Pearson Correlation	-.032	-.090	1	.264*	.443**	.382**
	Sig. (2-tailed)	.799	.477		.034	.000	.002
	N	65	65	65	65	65	65
EASE_M2T2	Pearson Correlation	-.185	-.154	.264*	1	.098	.025
	Sig. (2-tailed)	.139	.220	.034		.440	.841
	N	65	65	65	65	65	65
DISHQUALITY_M2T2	Pearson Correlation	.047	.082	.443**	.098	1	.418**
	Sig. (2-tailed)	.711	.518	.000	.440		.001
	N	65	65	65	65	65	65
PRICE_M2T2	Pearson Correlation	.060	.074	.382**	.025	.418**	1
	Sig. (2-tailed)	.633	.557	.002	.841	.001	
	N	65	65	65	65	65	65

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

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

Table 13: Correlation of variables of tri-fold leather bound menu (M2T2)

Correlations

		WEIGHT_M3T1	SIZE_M3T1	QUALITY_M3T1	EASE_M3T1	DISHQUALITY_M3T1	PRICE_M3T1
WEIGHT_M3T1	Pearson Correlation	1	.295*	-.234	-.266*	-.152	-.004
	Sig. (2-tailed)		.017	.061	.032	.227	.977
	N	65	65	65	65	65	65
SIZE_M3T1	Pearson Correlation	.295*	1	.068	-.119	.043	-.081
	Sig. (2-tailed)	.017		.588	.344	.736	.521
	N	65	65	65	65	65	65
QUALITY_M3T1	Pearson Correlation	-.234	.068	1	.523**	.527**	.068
	Sig. (2-tailed)	.061	.588		.000	.000	.589
	N	65	65	65	65	65	65
EASE_M3T1	Pearson Correlation	-.266*	-.119	.523**	1	.294*	-.139
	Sig. (2-tailed)	.032	.344	.000		.017	.268
	N	65	65	65	65	65	65
DISHQUALITY_M3T1	Pearson Correlation	-.152	.043	.527**	.294*	1	.144
	Sig. (2-tailed)	.227	.736	.000	.017		.254
	N	65	65	65	65	65	65
PRICE_M3T1	Pearson Correlation	-.004	-.081	.068	-.139	.144	1
	Sig. (2-tailed)	.977	.521	.589	.268	.254	
	N	65	65	65	65	65	65

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

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

Table 14: Correlation of variables of book style paper menu (M3T1)

Correlations

		WEIGHT_M3T2	SIZE_M3T2	QUALITY_M3T2	EASE_M3T2	DISHQUALITY_M3T2	PRICE_M3T2
WEIGHT_M3T2	Pearson Correlation	1	.593**	-.014	.170	.004	.204
	Sig. (2-tailed)		.000	.910	.175	.972	.104
	N	65	65	65	65	65	65
SIZE_M3T2	Pearson Correlation	.593**	1	-.048	.209	.023	.175
	Sig. (2-tailed)	.000		.701	.094	.857	.162
	N	65	65	65	65	65	65
QUALITY_M3T2	Pearson Correlation	-.014	-.048	1	.037	.498**	.279*
	Sig. (2-tailed)	.910	.701		.772	.000	.025
	N	65	65	65	65	65	65
EASE_M3T2	Pearson Correlation	.170	.209	.037	1	.242	-.010
	Sig. (2-tailed)	.175	.094	.772		.052	.938
	N	65	65	65	65	65	65
DISHQUALITY_M3T2	Pearson Correlation	.004	.023	.498**	.242	1	.274*
	Sig. (2-tailed)	.972	.857	.000	.052		.027
	N	65	65	65	65	65	65
PRICE_M3T2	Pearson Correlation	.204	.175	.279*	-.010	.274*	1
	Sig. (2-tailed)	.104	.162	.025	.938	.027	
	N	65	65	65	65	65	65

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

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

Table 15: Correlation of variables of book style leather bound menu (M3T2)

This makes us understand that the Weight (W) and Size (S) comparison are always significant and is positively correlated to one another in each menu. Another significant relationship that must be pointed out is that the Quality (Q) of the menu covering has a 100% significant positive relationship with the Dish Quality Perception (DQ). Another thing to highlight is that the Quality (Q) and Price Perception (P) has been significantly correlated in 4 out of 6 kinds of menus. While the Dish Quality Perception (DQ) and Price Perception (P) similarly has 4 out of 6 significant correlations. 3 out of 6 kinds of menu correspondingly have Size (S) and Price Perception (P) and Ease of Access (E) and Dish Quality Perception (DQ) significant correlation present.

Reliability and Validity Test

The following set of tables are the reliability analysis showing the Cronbach's Alpha of all variables within a kind of menu. (See Appendix C)

Case Processing Summary

		N	%
Cases	Valid	65	100.0
	Excluded[a]	0	.0
	Total	65	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.799	18

Table 16: Reliability Analysis of single panel laminated menu (M1T1)

Case Processing Summary

		N	%
Cases	Valid	63	96.9
	Excluded[a]	2	3.1
	Total	65	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.682	18

Table 17: Reliability Analysis of single panel sintra board menu (M1T2)

Case Processing Summary

		N	%
Cases	Valid	63	96.9
	Excluded[a]	2	3.1
	Total	65	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.845	18

Table 18: Reliability Analysis of a tri-fold paper menu (M2T1)

Case Processing Summary

		N	%
Cases	Valid	64	98.5
	Excluded[a]	1	1.5
	Total	65	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.702	18

Table 19: Reliability Analysis of tri-fold leather bound menu (M2T2)

Case Processing Summary

		N	%
Cases	Valid	63	96.9
	Excluded[a]	2	3.1
	Total	65	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.553	18

Table 20: Reliability Analysis of book style paper menu (M3T1)

Case Processing Summary

		N	%
Cases	Valid	64	98.5
	Excluded[a]	1	1.5
	Total	65	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.770	18

Table 21: Reliability Analysis of book style leather bound menu (M3T2)

Reliability analysis is then carried out to ensure the items in each component were reliable (Bearden & Netemeyer, 1999). Reliability analysis has two goals. The first goal is to ensure the reliability of the scale and the second is to increase the reliability of the scale. The most popular test for reliability analysis is Cronbach's alpha. The closer that Cronbach's alpha is to one, the higher the reliability of the scale. Scores over 0.7 are considered to be acceptable for most purposes (Bryman & Cramer, 2002).

It is a very good sign that the Cronbach's Alpha of each menu is above .70, excluding M3T1. This suggests that the items have relatively high internal consistency.

Factor Analysis

Factor Analysis is also implemented to determine the variables if it has common underlying dimensions or factor. a KMO and Bartlett's test is put in to indicate the suitability of data for structure detection.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.669
Bartlett's Test of Sphericity	Approx. Chi-Square	433.276
	df	153
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.838	26.876	26.876	4.838	26.876	26.876	2.662	14.789	14.789
2	2.288	12.711	39.587	2.288	12.711	39.587	2.432	13.512	28.301
3	1.850	10.278	49.865	1.850	10.278	49.865	2.039	11.328	39.629
4	1.323	7.348	57.213	1.323	7.348	57.213	2.033	11.293	50.922
5	1.254	6.966	64.179	1.254	6.966	64.179	1.794	9.967	60.890
6	1.034	5.746	69.925	1.034	5.746	69.925	1.626	9.035	69.925
7	.783	4.352	74.277						
8	.707	3.926	78.203						
9	.662	3.679	81.883						
10	.631	3.504	85.386						
11	.533	2.960	88.347						
12	.486	2.703	91.049						
13	.458	2.545	93.594						
14	.335	1.862	95.457						
15	.260	1.443	96.899						
16	.221	1.226	98.126						
17	.198	1.103	99.228						
18	.139	.772	100.000						

Extraction Method: Principal Component Analysis.

Table 22: Factor Analysis of single panel laminated menu (M1T1)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.636
Bartlett's Test of Sphericity	Approx. Chi-Square	447.280
	df	153
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.981	22.114	22.114	3.981	22.114	22.114	2.442	13.566	13.566
2	3.041	16.896	39.010	3.041	16.896	39.010	2.349	13.048	26.614
3	1.896	10.534	49.544	1.896	10.534	49.544	2.236	12.423	39.037
4	1.588	8.823	58.367	1.588	8.823	58.367	2.050	11.390	50.426
5	1.346	7.478	65.845	1.346	7.478	65.845	1.996	11.087	61.513
6	1.012	5.625	71.470	1.012	5.625	71.470	1.792	9.957	71.470
7	.820	4.555	76.025						
8	.753	4.181	80.206						
9	.678	3.769	83.974						
10	.602	3.342	87.316						
11	.475	2.637	89.953						
12	.400	2.225	92.178						
13	.377	2.094	94.272						
14	.266	1.475	95.747						
15	.237	1.316	97.063						
16	.204	1.133	98.197						
17	.175	.971	99.167						
18	.150	.833	100.000						

Extraction Method: Principal Component Analysis.

Table 23: Factor Analysis of single panel sintra board menu (M1T2)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.774
Bartlett's Test of Sphericity	Approx. Chi-Square	655.742
	df	153
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	6.162	34.236	34.236	6.162	34.236	34.236	5.316
2	2.802	15.566	49.802	2.802	15.566	49.802	2.156
3	1.677	9.317	59.119	1.677	9.317	59.119	3.516
4	1.317	7.315	66.434	1.317	7.315	66.434	2.832
5	1.168	6.490	72.924	1.168	6.490	72.924	2.450
6	.883	4.906	77.830				
7	.669	3.717	81.547				
8	.572	3.178	84.725				
9	.542	3.009	87.734				
10	.442	2.455	90.190				
11	.406	2.257	92.447				
12	.299	1.661	94.108				
13	.277	1.538	95.646				
14	.241	1.337	96.983				
15	.210	1.166	98.149				
16	.161	.895	99.044				
17	.107	.593	99.637				
18	.065	.363	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 24: Factor Analysis of tri-fold paper menu (M2T1)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.617
Bartlett's Test of Sphericity	Approx. Chi-Square	453.382
	df	153
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.103	22.792	22.792	4.103	22.792	22.792	3.063
2	3.028	16.821	39.613	3.028	16.821	39.613	2.767
3	1.616	8.980	48.593	1.616	8.980	48.593	2.333
4	1.384	7.687	56.280	1.384	7.687	56.280	2.726
5	1.181	6.562	62.842	1.181	6.562	62.842	1.603
6	1.117	6.206	69.048	1.117	6.206	69.048	1.423
7	1.085	6.029	75.077	1.085	6.029	75.077	1.348
8	.828	4.602	79.678				
9	.732	4.069	83.747				
10	.551	3.060	86.807				
11	.499	2.772	89.579				
12	.486	2.702	92.281				
13	.366	2.036	94.317				
14	.316	1.756	96.073				
15	.246	1.365	97.439				
16	.177	.985	98.424				
17	.173	.959	99.383				
18	.111	.617	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 25: Factor Analysis of tri-fold leather bound menu (M2T2)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.679
Bartlett's Test of Sphericity	Approx. Chi-Square	420.649
	df	153
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.374	24.299	24.299	4.374	24.299	24.299	2.726
2	2.349	13.048	37.348	2.349	13.048	37.348	2.234
3	2.124	11.802	49.150	2.124	11.802	49.150	2.680
4	1.613	8.962	58.112	1.613	8.962	58.112	1.768
5	1.363	7.575	65.687	1.363	7.575	65.687	2.530
6	1.022	5.677	71.364	1.022	5.677	71.364	2.633
7	.821	4.560	75.924				
8	.726	4.031	79.956				
9	.605	3.363	83.319				
10	.555	3.083	86.402				
11	.490	2.722	89.124				
12	.391	2.170	91.294				
13	.373	2.070	93.364				
14	.308	1.708	95.073				
15	.269	1.492	96.565				
16	.251	1.397	97.961				
17	.193	1.070	99.031				
18	.174	.969	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 26: Factor Analysis of book style paper menu (M3T1)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.662
Bartlett's Test of Sphericity	Approx. Chi-Square	435.708
	df	153
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3.860	21.447	21.447	3.860	21.447	21.447	2.687
2	3.047	16.929	38.376	3.047	16.929	38.376	3.220
3	2.215	12.305	50.681	2.215	12.305	50.681	2.546
4	1.545	8.584	59.264	1.545	8.584	59.264	2.445
5	1.191	6.616	65.881	1.191	6.616	65.881	2.060
6	.944	5.246	71.127				
7	.899	4.996	76.122				
8	.741	4.119	80.242				
9	.592	3.288	83.529				
10	.554	3.076	86.605				
11	.446	2.478	89.083				
12	.411	2.283	91.367				
13	.352	1.956	93.323				
14	.305	1.697	95.020				
15	.300	1.668	96.687				
16	.249	1.385	98.072				
17	.202	1.121	99.193				
18	.145	.807	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 27: Factor Analysis of book style leather bound menu (M3T2)

Tables 22 to 27 shows the KMO and Bartlett's test and total variance explained table. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a measure of how suited the data is for factor analysis. It has a range of 0 to 1, the closer the value is to 1, the better. If the value is less than 0.50, the results of the factor analysis probably won't be very useful. A value of .60 is the suggested minimum and commonly direct that a factor analysis may be beneficial with your data. (Cerny & Kaiser, 1977). While the Bartlett's test of sphericity tries to determine if your correlation matrix is an identity matrix, meaning that the variables are unrelated and therefore unsuitable for structure detection. A maximum value of 0.05 significance level is s suggested, if it is less than 0.05 then factor analysis is useful to the data. (Cerny & Kaiser, 1977)

Factor Analysis is made to find items that co-varies strongly. The PCA or Principal Component Analysis looks at all the factors and relations among the components and will compare and weigh them differently to see if the factor's validity is converging. (See Appendix D)

Mean Analysis

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
WEIGHT_M1T1	65	1.00	5.67	2.2872	.98403	.858	.297	1.099	.586
SIZE_M1T1	65	1.00	5.67	3.1949	1.20314	.203	.297	-.762	.586
QUALITY_M1T1	65	3.67	6.67	5.1538	.64301	.188	.297	.059	.586
EASE_M1T1	65	1.33	7.00	5.9231	.89320	-2.576	.297	10.654	.586
DISHQUALITY_M1T1	65	3.00	7.00	5.3641	.75398	-.678	.297	.787	.586
PRICE_M1T1	65	2.00	6.00	4.4513	.71790	-.902	.297	1.646	.586
Valid N (listwise)	65								

Table 28: Mean Analysis of single panel laminated menu (M1T1)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
WEIGHT_M1T2	65	1.00	6.00	2.5538	1.36458	.680	.297	-.561	.586
SIZE_M1T2	65	1.00	6.33	3.4667	1.36270	-.167	.297	-.927	.586
QUALITY_M1T2	65	3.67	7.00	5.5641	.71425	-.185	.297	-.230	.586
EASE_M1T2	65	2.67	7.00	5.9538	.96982	-1.147	.297	1.249	.586
DISHQUALITY_M1T2	65	3.00	7.00	5.5179	.81656	-.587	.297	.240	.586
PRICE_M1T2	65	2.33	6.00	4.4872	.76166	-.228	.297	-.138	.586
Valid N (listwise)	65								

Table 29: Mean Analysis of single panel sintra board menu (M1T2)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
WEIGHT_M2T1	65	1.00	5.33	2.2615	1.14941	.858	.297	.074	.586
SIZE_M2T1	65	1.00	6.33	3.2769	1.32755	.279	.297	-.497	.586
QUALITY_M2T1	65	3.33	7.00	5.2821	1.01590	-.006	.297	-1.007	.586
EASE_M2T1	65	2.33	7.00	5.9385	.92776	-1.566	.297	3.186	.586
DISHQUALITY_M2T1	65	3.33	7.00	5.4308	.98023	-.525	.297	-.746	.586
PRICE_M2T1	65	2.00	6.00	4.3128	.88167	-.381	.297	.268	.586
Valid N (listwise)	65								

Table 30: Mean Analysis of tri-fold paper menu (M2T1)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
WEIGHT_M2T2	65	1.00	6.33	3.3692	1.24181	.117	.297	-.267	.586
SIZE_M2T2	65	1.33	6.00	3.9744	1.14156	-.467	.297	-.501	.586
QUALITY_M2T2	65	4.00	7.00	5.5641	.68699	-.113	.297	-.121	.586
EASE_M2T2	65	4.00	7.00	5.9179	.64289	-.704	.297	.698	.586
DISHQUALITY_M2T2	65	3.33	7.00	5.6205	.71414	-.670	.297	.919	.586
PRICE_M2T2	65	2.33	6.00	4.5538	.70286	-.486	.297	.668	.586
Valid N (listwise)	65								

Table 31: Mean Analysis of tri-fold leather bound menu (M2T2)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
WEIGHT_M3T1	65	1.00	5.00	2.2615	1.04995	.743	.297	-.238	.586
SIZE_M3T1	65	1.67	6.67	3.8103	1.13799	.030	.297	-.393	.586
QUALITY_M3T1	65	4.00	7.00	5.3744	.68086	.101	.297	-.613	.586
EASE_M3T1	65	2.67	7.00	5.9538	.88364	-1.471	.297	2.875	.586
DISHQUALITY_M3T1	65	4.00	7.00	5.5795	.69291	.059	.297	-.181	.586
PRICE_M3T1	65	2.67	6.00	4.3692	.67732	-.001	.297	.207	.586
Valid N (listwise)	65								

Table 32: Mean Analysis of book style paper menu (M3T1)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
WEIGHT_M3T2	65	2.00	7.00	4.7538	1.38102	-.295	.297	-1.023	.586
SIZE_M3T2	65	1.67	7.00	4.5641	1.20174	-.200	.297	-.422	.586
QUALITY_M3T2	65	4.00	7.00	5.7436	.69664	-.317	.297	-.168	.586
EASE_M3T2	65	1.67	7.00	5.4615	1.17067	-1.378	.297	1.475	.586
DISHQUALITY_M3T2	65	2.67	7.00	5.7333	1.01071	-1.110	.297	.734	.586
PRICE_M3T2	65	2.67	7.00	4.8615	.99459	-.111	.297	-.468	.586
Valid N (listwise)	65								

Table 33: Mean Analysis of book style leather bound menu (M3T2)

The last analysis that is done is the mean analysis, which measures the average Weight (W), Size (S), Quality (Q), Ease of Access (E), Dish Quality Perception (DQ), and the Price Perception (P) of the respondents. It also shows the standard deviation of the answers given by respondents for each menu. The skewness and kurtosis of the line column, skewness shows symmetry, that shows if the data is symmetrical compared to the left and right from the center. Anything between -1 to +1 is an acceptable value of skewness. The kurtosis, on the other hand, is a measure whether the data are heavy-tailed or light-tailed relative to a normal distribution. The kurtosis value must be less than x3 of the standard error to have a satisfactory value.

Results

With the results of the data analysis, the data presented are significant and reliable. We can now use the data to be interpreted in the results without issues.

Experiment 1

Results from experiment 1 are presented and discussed in this section, and then their application to the full scale study is reviewed to answer RQ1. Overall, 390 respondents have answered the survey questionnaire. Participants rated their answers they viewed based on the variables. A 7-pt Likert-scale measuring the agreement (1 = strongly disagree, 4 = neither disagree nor agree, 7= strongly agree), quality perception (1 = extremely poor, 4 = fair, 7= excellent) and price perception (1 = very cheap, 4 = neutral, 7 = very expensive) response set in interval variables.

Charts 1, 2 and 3 presents result from all respondent data collected regarding their insight towards the Weight (W), Size (S), Quality (Q), Ease of Access (E), Dish Quality Perception (DQ), and the Price Perception (P) for each menu type in each layout. With the mean analysis, all of the variables' average in each designated question or indicator in the questionnaire is totaled and used in the charts. Different colors were implemented for each menu to better understand the results. The menu names M_T_ are labeled by their layout and type. M is followed by numbers 1, 2 or 3, which means that (1) is a single panel layout menu, (2) is a folding menu kind of layout, and (3) is a book style menu layout. While T stands for which type of menu it is (1) typically means the smaller, lighter and has less quality covering and (2) is heavier, bulkier and has a better material of covering. M1T1, colored in blue, is the laminated, layout 1, single panel menu. M1T2 is in orange, which is

the sticker on a sintra board, single panel menu. M2T1, in yellow, is a paper menu with a tri-fold layout. M2T2, in green, is a tri-fold menu that is covered in leather. M3T1, gray, is a paper menu with a book style layout. Lastly M3T2, is a book style menu with a leather cover. Chart 4 explains the summary of charts number 1, 2 and 3 to compare all menus in all layouts easier.

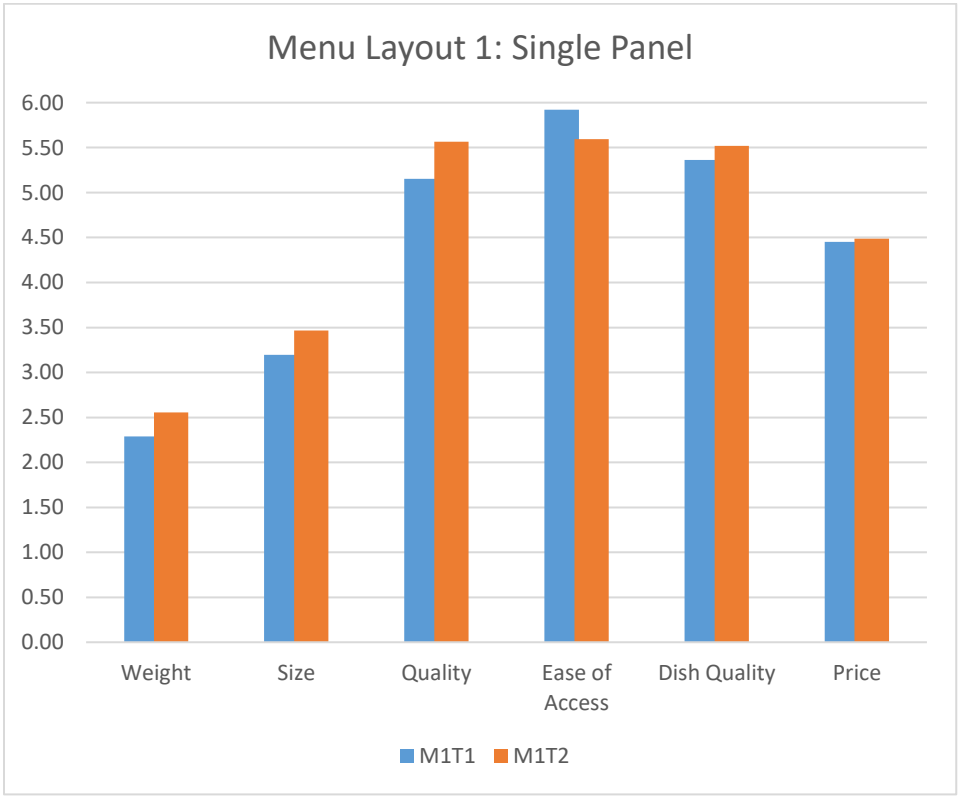

Chart 1: Difference in the average of each menu in menu layout 1

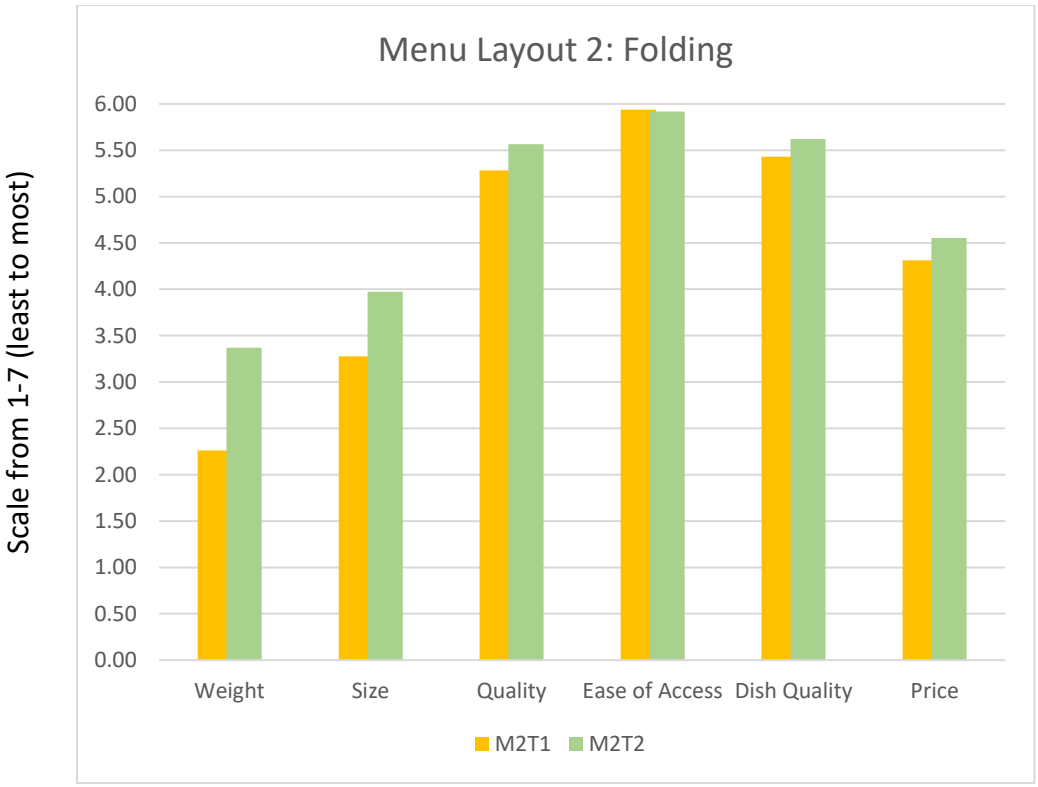

Chart 2: Difference in the average of each menu in menu layout 2

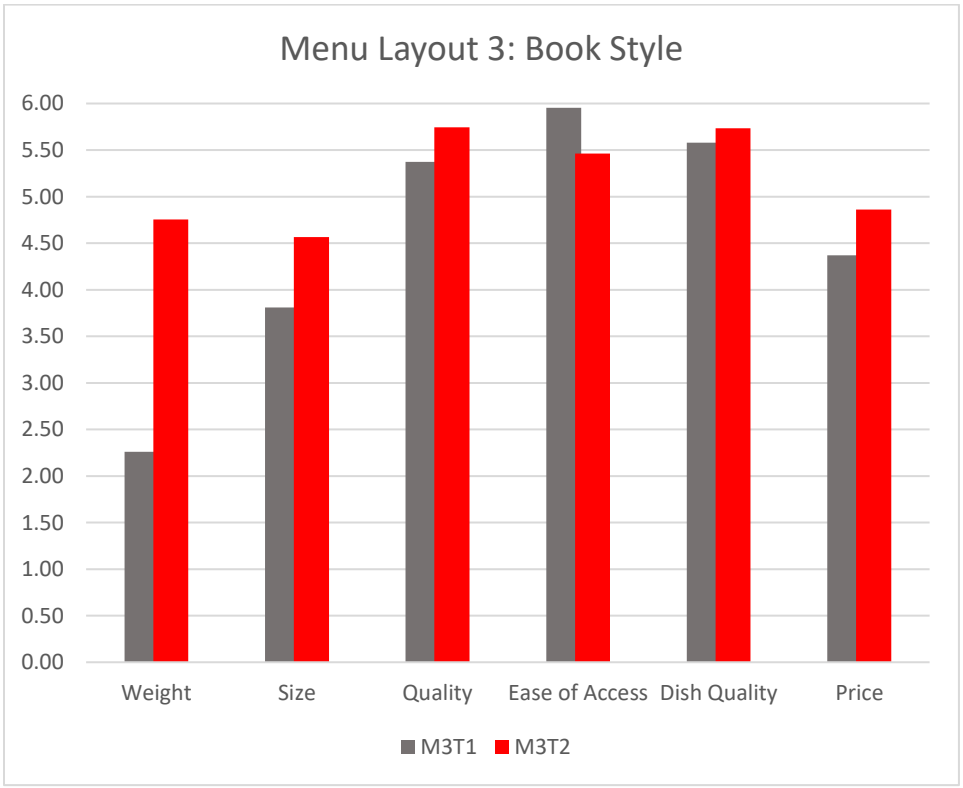

Chart 3: Difference in the average of each menu in menu layout 3

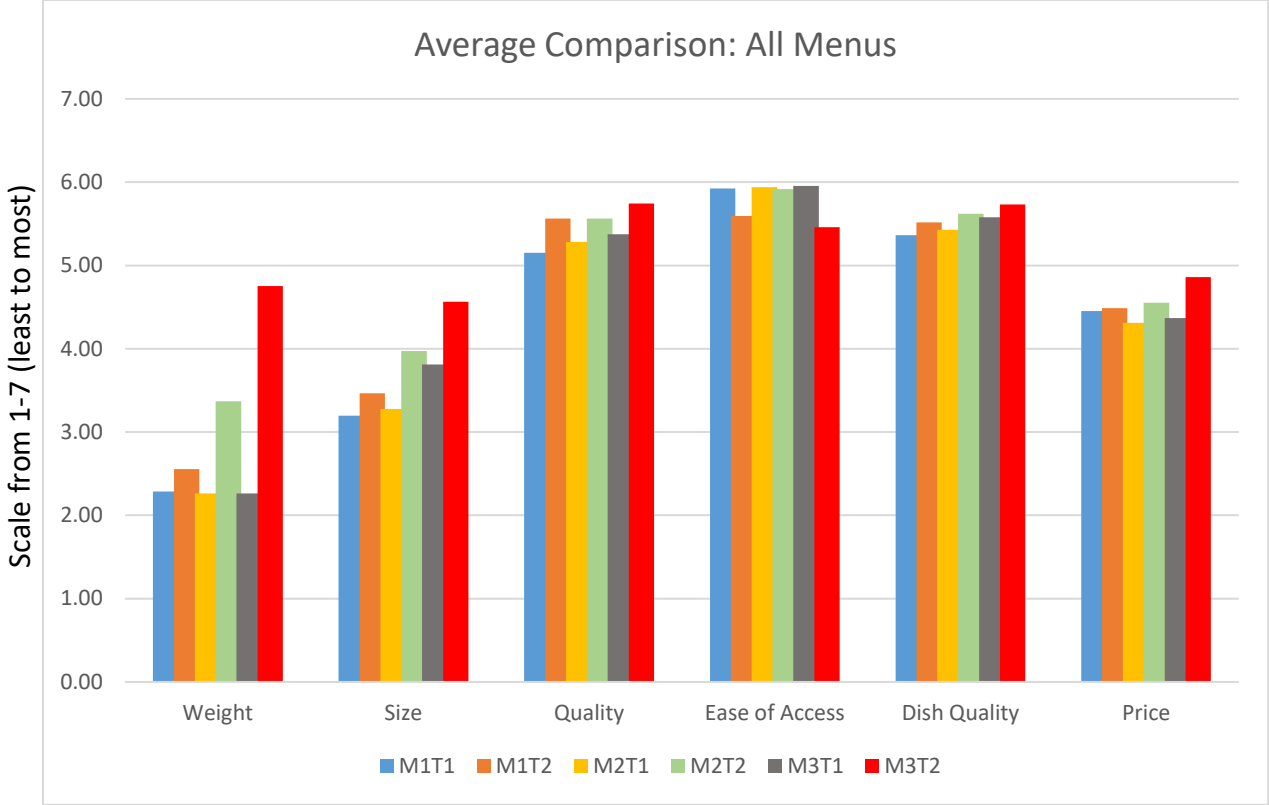

Chart 4: Difference in the average of each menu

There is an obvious pattern that in each of the layouts, the second type of menu (T2), which is the heavier and bulkier, is higher in weight, size and menu covering material quality perception of the respondents than the first type of menu (T1). It is interesting to see that even just for a single panel layout, respondents seem to think that M1T2, the heavier and bigger sintra board menu, has a better quality covering compared to the laminated menu, M1T1. While for menu layout 2 and 3, it is clear that the leather covered menus (M2T2 and M3T2) has a better menu material quality than the paper ones (M2T1 and M3T1). With terms of ease of access, there is a negative relationship that the heavier the menu is, people think that the accessibility of reading the menu is less than a lighter one. Its ease or comfortability of reading, handing, turning of the pages and scanning or navigating through the menu can be influenced by the weight and size of the menu.

For the dependent variables, the results can be interpreted as the heavier and bigger the menu is, and the better quality covering the menu has, seems to have a positive relationship with the respondent's dish quality perception and price perception. Meaning that participants judged the menu's dish quality and price range even though they haven't seen the actual food and their pricing yet. If you compare in layouts 1, 2 and 3, the second type of menu (T2) has a better dish quality perception and a higher price perception the respondents had.

Comparing among each type of menu, M1T1 compared to M3T2 has a significant difference in weight and size. In the results, M1T1 has the least acceptable menu material quality while M3T2 has the most acceptable menu material quality, additionally, M1T1 has the worst perception in dish quality and M3T2 has the best perception in dish quality. But regarding to the ease of access, M3T2 has the least acceptable score compared to the most acceptable, M1T1. In terms of price perception however, lighter and smaller folding menus (M2T1) and book style menus (M3T1) seem to have a cheaper price perception than single panel menus (M1T1 and M1T2).

Experiment 2

Each participant was asked at the bottom of the questionnaire what their orders will be to answer RQ1. The orders are then averaged regardless of how many dishes they hypothetically ordered. Chart 5 explains the average order of respondents in each kind of menu. It is divided into three layouts and each menu are colored with the same colors

previously. The currency used is in PHP or Philippine Peso. Rough estimates of PHP to EUR is around 60 PHP to 1 EUR.

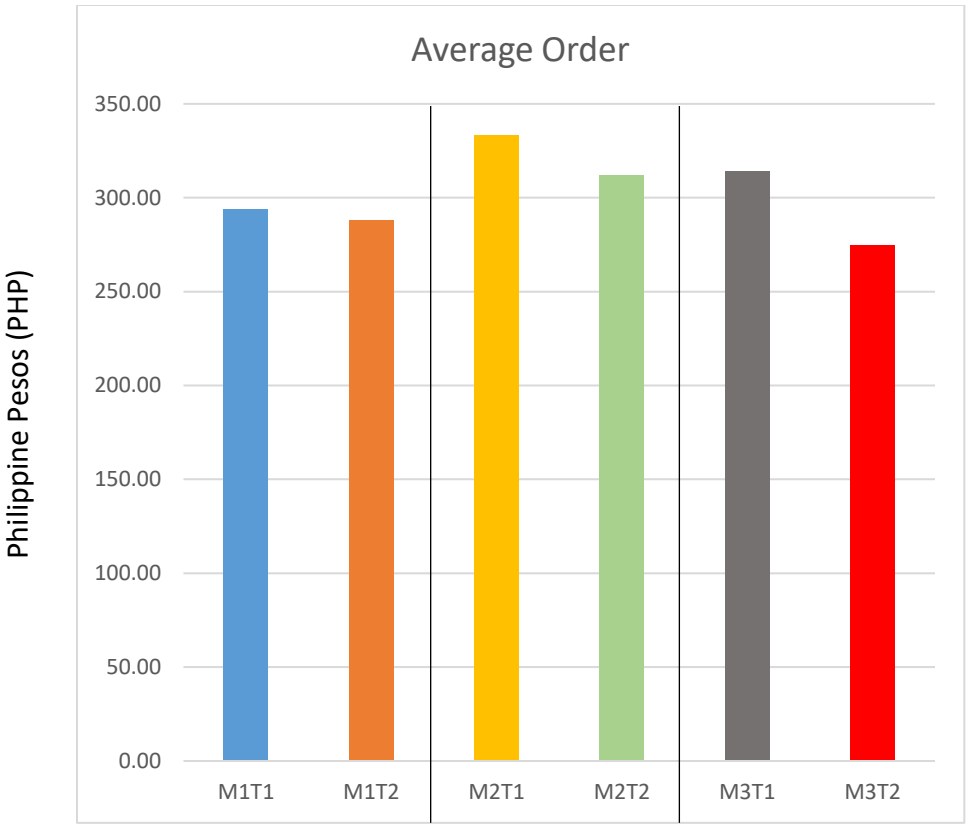

Chart 5: Difference in the average order of each menu

It is clear that in each layout of the menu, the first type (T1), which is the lighter, smaller and less material quality, has a surprising result of a higher average check than the second type of menu (T2). The highest average check is to M2T1, the paper tri-fold menu, followed by M3T1, the paper book-style menu, and placing third is M1T1, the laminated single panel menu.

Discussion

Basing on the results, heavier, bigger and better menu material quality do change the customer's perception on dish quality and expected price range, but takes less average orders. Restaurateurs and managers can use this information to balance their menu card characteristics based on the brand of the restaurant and also their market. For example, a low earning family house casual restaurant can properly and efficiently use a lighter and simple menu material quality to further ensure higher average checks. However, they have to be careful not to overprice their price range because the perception of the customers think that it is in the cheaper range. Additionally, a casual medium sized bistro that caters to middle income to high income earning families can have the option to balance their menu cards and menu materials to increase the dish quality perception of first time customers.

Restaurants always had the ability to freely choose which type of menu they will present to the customers. Normally, in modern restaurants, different kinds of materials are used to compliment the branding of the restaurant. In the science of menu design, this new field of looking into menu card characteristics can be further studied by future researchers and hospitality experts. The material the menu is made out of can affect the dish quality perception and the price perception of your customers. In this experiment, the materials used are only laminated plastics, sintra boards, papers and leather covers. There are a lot more kinds of materials that can be used by managers and restaurateurs for their menus like wood, stone, metal and digital. Further studies like this is encouraged to help understand the menu card characteristics influence to the customers.

Indeed, the research done by Magnini (2016) is also confirmed in this thesis with regards to the menu weight and the people's perception to a restaurant's level of quality, in this case, the dish quality and price range are the ones that are measured. Another research that may have confirmed this theory is the visual cues of the physical packaging can be relative to the customer perception of brand quality and value (Wang, 2013), also complementing the study made by Dodds et al. (1991) concluding that price has a positive relationship with perceived quality. This study has resulted in several identical theories mentioned in the theoretical framework.

Another thing to point out is, as stated in the theoretical framework, the field of Menu Card Characteristics has been studied so limitedly that this study may help out initiate further studies that may get involved with regards to the specifications of the main menu card. Thus, further studies by future scholars are welcomed.

One thing that can be further studied is the time on how long the customer order based on the layout of the menu. Additionally, will the loyalty of customers change based only through the menu card characteristics. Other restaurants can also use different style of menu card characteristics to their separate dessert menu or beverage menu. Furthermore, on-the-table marketing menus can possibly be optimized just by using a different kind of material. Further studies are also encouraged in the digital menu platform. This thesis is only about hard copy menus. Digital menus are getting more popular today and can be seen in casual restaurants by using tablets and television screens. This thesis also targeted casual restaurant only, not fast-food or fine dining restaurants. Will a different kind of menu card characteristic affect the perception of

fine-dining customers and fast-food customers? These kind of studies can use this thesis as a baseline or a foundation to future studies.

Limitations

Certain factors can influence the validity of the data that is measured. Outside factors include the budget of the customer. The respondents are a mix of the working class citizens and students. Different budgeting constraints affects the data of this thesis especially on Experiment 2. Some respondents also think that the scenario of the survey is hypothetical and can further affect the ordering and average check data. Another limitation of this study is the pre-conceived idea of the restaurant, IMÀ. Because the restaurant is situated near UST, some of the students that were surveyed in UST already has an idea on how much the average price of the restaurant and also the quality of the dishes itself This may be affecting the perception of the students based on the FAMM model be Hansen & Gustafsson (2005). The third limitation is the menu design itself. All of the menu are designed with the same color, labeling, pricing, fonts, pictures, and boxes. The only differences are the layout and the independent variables (weight, size, and material quality). A better picture can initially change the perception of the customers and also affect the selection likelihood of the dishes. The next limitation is the demographics of the certain area, and also the environment of the respondent, high income earning individuals in BGC and Makati can affect the average decision of the whole sample size, and with the environment of the respondent, a better ambiance can also move their decisions This is pertaining to the atmospherics (Kotler, 1973) or the effect of physical stimuli to the customers or in this case, the respondents.

Conclusion

This study concludes that there is a positive relationship with the weight, size of the menu, ease of access of the menu and menu material quality can affect the customer's dish quality perception and price perception. Confirming RQ1and its hypotheses 1, 2, 3, and 4. The heavier and bigger the menu is, first time customers will perceive a better dish quality but expensive price range of a casual restaurant (Hypotheses 1 and 2). Additionally, the better material quality the menu cover has, the better dish quality and more expensive price perception first time customers think the restaurant will be (Hypothesis 3). And lastly, the better ease of access the customers has on the menu, the better dish quality they will perceive but also they believe it have a more expensive price range (Hypothesis 4).

For RQ2, it is also confirmed that the weight, size, ease of access of the menu and menu material quality can influence the selection likelihood and average check of the customer. It is believed that the heavier, bigger, worse ease of access and better material quality the menu has, the lower average check it will have. On the other hand, lighter, smaller, better ease of access and worse material quality the menu has a higher average check (Hypothesis 1).

In conclusion, people is set to believe that the dish quality is better and it is more expensive to eat in restaurants with heavier, bigger, less accessible and better quality menus, but will order less compared to restaurants with lighter, smaller, more accessible and worse quality menus, which customers is set to believe to have lower dish quality and cheaper price range.

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Appendices

Appendix A

Letter of Permission to Conduct a Study

March 16, 2018
Eastwood City Mall and Citywalk
116 Eastwood Ave, Bagumbayan, Quezon City, 1110 Metro Manila

RE: Permission to Conduct Research Study

Dear Eastwood,

I am writing to request permission to conduct a research study at your site in Eastwood City Mall and Citywalk, Quezon City. I am currently enrolled in Masters in Culinary Leadership and Innovation at Institut Paul Bocuse in Lyon, France, and am in the process of writing my Master's Thesis. The study is entitled "Menu Mediums: Understanding the Influence of Physical Characteristics of a Restaurant Menu to Customers."

I hope that the administration will allow me to give out a survey to shoppers to complete a 1-page questionnaire (copy enclosed).

If approval is granted, participants will complete the survey after approaching them inside the mall grounds. I am planning to give out the surveys during the hours of 11am to 9pm from the 23rd of March 2018 until the 10th of May 2018. The survey process should take no longer than 3-5 minutes for each participant. The survey results will be pooled for the thesis project and individual results of this study will remain absolutely confidential and anonymous. No costs will be incurred by either the mall or the individual participants.

Your approval to conduct this study will be greatly appreciated. I will follow up with a telephone call next week and would be happy to answer any questions or concerns that you may have at that time. You may contact me at my email address: jes.millano@gmail.com or my thesis adviser, Professor Kai Victor Hansen: kai.v.hansen@uis.no

If you agree, kindly sign below and return the signed form. Alternatively, this letter is acknowledging your consent and permission for me to conduct this survey/study at your institution.

Sincerely,

Jespher Millano
Graduate Student

cc: Dr. Kai Victor Hansen, University of Stavanger, Thesis Adviser

Approved by:

_____ _____ _____
Printed name and title Signature Date

Questionnaire

M_T_

Survey Questionnaire

Gender: _____ Age: _____ Occupation: _____

After reviewing the menu without seeing the prices, please spare a few minutes of your valuable time to answer this simple questionnaire.

(Cross out your choice)

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
1. I find the menu heavy and hard to raise	1	2	3	4	5	6	7
2. I think that the food will be prepared with fresh and top quality products	1	2	3	4	5	6	7
3. I find the menu relatively easy to navigate through the dishes	1	2	3	4	5	6	7
4. I find the dimensions of the menu pretty big	1	2	3	4	5	6	7
5. I didn't have a hard time looking around the menu items	1	2	3	4	5	6	7
6. I find the menu's size bigger than my field of vision	1	2	3	4	5	6	7
7. The menu is made of heavy materials	1	2	3	4	5	6	7
8. I find the menu's folds/pages bulky	1	2	3	4	5	6	7
9. Scanning through the menu items are easy and hassle-free	1	2	3	4	5	6	7
10. It is difficult to lift up the menu due to its weight	1	2	3	4	5	6	7
	Extremely poor	Very poor	Poor	Fair	Good	Very good	Excellent
11. I think that the covering and paper of the menu is made from _____ quality	1	2	3	4	5	6	7
12. The menu cover is made from a ___ standard of material	1	2	3	4	5	6	7
13. After seeing the menu, I think that the food is prepared by _____ professional food handlers	1	2	3	4	5	6	7
14. I think that the standard of the dishes in the restaurant is of _____ quality	1	2	3	4	5	6	7
15. I find the menu materials is made from ___ quality	1	2	3	4	5	6	7
	Very cheap	Cheap	Somewhat cheap	Neutral	Somewhat expensive	Expensive	Very Expensive
16. I think that the average price of the menu is in the ___ scale	1	2	3	4	5	6	7
17. After seeing the menu, I think that the food is made from _____ products/raw materials	1	2	3	4	5	6	7
18. The menu made it look like the dishes were of ___ price range	1	2	3	4	5	6	7

After answering the questions above, you can now look at the menu with the price tags on and answer this question:

If given to a real-life restaurant setting, my order would likely be the following:

_____

_____

_____

Thank you for your time and cooperation! :)

Menu Design


imà
IMÀ KITCHEN
A 'LA CARTE
CHICKEN
ROASTED CHICKEN
FRIED CHICKEN
CHICKEN INASAL
BEEF
BAGNET
BEEF PARES
BEEF TAPA
SALPICAO
BULALO
FISH
INIHAW NA TILAPIA
DAING NA BANGUS
PORK
PORK BARBECUE
GRILLED PORKCHOP
PORK SISIG
GRILLED LIEMPO
SIOMAI (6 PCS)
WAGYU CUBES
UNLIMITED SISIG
(UNLI SISIG + UNLI RICE + UNLI ICED TEA)
*DINE-IN ONLY *FINISH ONE PLATE BEFORE REFILLING *NO TAKE-OUT
*NO LEFTOVERS *SHARING IS NOT ALLOWED *NO TIME LIMIT
/IMAKITCHENCAFE
@IMAKITCHENCAFE
IMAKITCHENCAFE@GMAIL.COM
0927-763-1494


NOODLE BOWL
1 CHOOSE YOUR NOODLE FLAVOR
PLAIN (NO MSG)
TOYO-MANSI
SWEET & SPICY
CACIO EL PEPE (NO MSG)
CHILI MANSI
EXTRA HOT CHILI
2 CHOOSE YOUR PROTEIN
ROASTED CHICKEN
PORK SISIG
WAGYU CUBES (5PCS)
BEEF TAPA
CHICKEN INASAL
LIEMPO
BARBECUE
SALPICAO
SIOMAI
3 CHOOSE YOUR VEGGIE
ASIAN CRUNCH
CORN & CARROTS
4 ADD EXTRA TOPPINGS
SOFTBOILED EGG (10)
CHEESE SLICE (10)
FRIED GARLIC (5)
SLICE OF BREAD (15)
FOR ONLY
RICE BOWL
SISIG
BEEF TAPA
WAGYU
SIOMAI
WAGYU-BBQ
BBQ
INASAL
PARES
SALPICAO
SPAM-MELT
DESSERTS
CHURROS
TIBOK-TIBOK
LECHE FLAN
EXTRA RICE & SIDES
STEAMED RICE
GARLIC RICE
BUTTER RICE
ALIGUE RICE
POTATO FRIES
SWEET POTATO FRI
SISIG FRIES
CHICKEN SKIN
BEVERAGES
ICED TEA
PINEAPPLE JUICE
CANNED SODA
BUKO JUICE
BOTTLED WATER
FLAVORED CHOCOL
COFFEE/CAPPUCC


imà
IMÀ KITCHEN
A 'LA CARTE
CHICKEN
ROASTED CHICKEN 105
FRIED CHICKEN 120
CHICKEN INASAL 105
BEEF
BAGNET 150
BEEF PARES 135
BEEF TAPA 150
SALPICAO 135
BULALO 140
FISH
INIHAW NA TILAPIA 170
DAING NA BANGUS 170
PORK
PORK BARBECUE 60
GRILLED PORKCHOP 150
PORK SISIG 220
GRILLED LIEMPO 150
SIOMAI (6 PCS) 60
WAGYU CUBES 95
UNLIMITED SISIG 335
(UNLI SISIG + UNLI RICE + UNLI ICED TEA)
*DINE-IN ONLY *FINISH ONE PLATE BEFORE REFILLING *NO TAKE-OUT
*NO LEFTOVERS *SHARING IS NOT ALLOWED *NO TIME LIMIT
/IMAKITCHENCAFE
@IMAKITCHENCAFE
IMAKITCHENCAFE@GMAIL.COM
0927-763-1494


NOODLE BOWL
1 CHOOSE YOUR NOODLE FLAVOR
PLAIN (NO MSG)
TOYO-MANSI
SWEET & SPICY
CACIO EL PEPE (NO MSG)
CHILI MANSI
EXTRA HOT CHILI
2 CHOOSE YOUR PROTEIN
ROASTED CHICKEN
PORK SISIG
WAGYU CUBES (5PCS)
BEEF TAPA
CHICKEN INASAL
LIEMPO
BARBECUE
SALPICAO
SIOMAI
3 CHOOSE YOUR VEGGIE
ASIAN CRUNCH
CORN & CARROTS
4 ADD EXTRA TOPPINGS
SOFTBOILED EGG (10)
CHEESE SLICE (10)
FRIED GARLIC (5)
SLICE OF BREAD (15)
FOR ONLY
85
RICE BOWLS
WITH UNLIMITED RICE!
SISIG 150
BEEF TAPA 140
WAGYU 125
SIOMAI 85
WAGYU-BBQ 140
BBQ 125
INASAL 140
PARES 125
SALPICAO 140
SPAM-MELT 160
DESSERTS
CHURROS 95
TIBOK-TIBOK 60
LECHE FLAN 60
EXTRA RICE & SIDES
STEAMED RICE 25
GARLIC RICE 35
BUTTER RICE 35
ALIGUE RICE 45
POTATO FRIES 50
SWEET POTATO FRIES 50
SISIG FRIES 95
CHICKEN SKIN 60
BEVERAGES
ICED TEA 30
PINEAPPLE JUICE 30
CANNED SODA 40
BUKO JUICE 55
BOTTLED WATER 35
FLAVORED CHOCOLATE 75
COFFEE/CAPPUCCINO 85

M1T1 Menu Style with Price Omitted and Included

M1T1 Menu Style Close-up of Laminated Plastic Material

M1T2 Menu Style with Price Omitted and Included

M1T2 Menu Style Close-up of Sintra Board Material

M2T1 Menu Style with Price Omitted

M2T1 Menu Style with Price Included

M2T1 Menu Style Close-up of Paper Material and Layout

M2T2 Menu Style with Price Omitted

M2T2 Menu Style with Price Included

M2T2 Menu Style Close-up of Leather Material and Layout

M3T1 Menu Style with Price Omitted

M3T1 Menu Style with Price Included

M3T1 Menu Style Layout with First and Last Pages

M3T1 Menu Style Close-up of Paper Material

M3T2 Menu Style with Price Omitted

M3T2 Menu Style with Price Included

M3T2 Menu Style Layout with First and Last Pages

M3T2 Menu Style Close-up of Leather Material

Appendix B

M1T2 Correlation of Indicators

Correlations

		(W1) I find the menu heavy and hard to raise	(W2)The menu is made of heavy materials	(W3) It is difficult to lift up the menu due to its weight
(W1) I find the menu heavy and hard to raise	Pearson Correlation	1	.621**	.506**
	Sig. (2-tailed)		.000	.000
	N	64	64	64
(W2)The menu is made of heavy materials	Pearson Correlation	.621**	1	.500**
	Sig. (2-tailed)	.000		.000
	N	64	65	65
(W3) It is difficult to lift up the menu due to its weight	Pearson Correlation	.506**	.500**	1
	Sig. (2-tailed)	.000	.000	
	N	64	65	65

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

Correlations

		(S1)I find the dimensions of the menu pretty big	(S2) I find the menu's size bigger than my field of vision	(S3) I find the menu's folds/pages bulky
(S1)I find the dimensions of the menu pretty big	Pearson Correlation	1	.494**	.359**
	Sig. (2-tailed)		.000	.003
	N	65	65	65
(S2) I find the menu's size bigger than my field of vision	Pearson Correlation	.494**	1	.345**
	Sig. (2-tailed)	.000		.005
	N	65	65	65
(S3) I find the menu's folds/pages bulky	Pearson Correlation	.359**	.345**	1
	Sig. (2-tailed)	.003	.005	
	N	65	65	65

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

Correlations

		(Q1) I think that the covering and paper of the menu is made from (blank) quality	(Q2) The menu cover is made from a (blank) standard of material	(Q3) I find the menu materials is made from (blank) quality
(Q1) I think that the covering and paper of the menu is made from (blank) quality	Pearson Correlation	1	.712**	.341**
	Sig. (2-tailed)		.000	.005
	N	65	65	65
(Q2) The menu cover is made from a (blank) standard of material	Pearson Correlation	.712**	1	.327**
	Sig. (2-tailed)	.000		.008
	N	65	65	65
(Q3) I find the menu materials is made from (blank) quality	Pearson Correlation	.341**	.327**	1
	Sig. (2-tailed)	.005	.008	
	N	65	65	65

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

Correlations

		(E1) I find the menu relatively easy to navigate through the dishes	(E2) I didn't have a hard time looking around the menu items	(E3) Scanning through the menu items are easy and hassle-free
(E1) I find the menu relatively easy to navigate through the dishes	Pearson Correlation	1	.528**	.573**
	Sig. (2-tailed)		.000	.000
	N	65	65	64
(E2) I didn't have a hard time looking around the menu items	Pearson Correlation	.528**	1	.613**
	Sig. (2-tailed)	.000		.000
	N	65	65	64
(E3) Scanning through the menu items are easy and hassle-free	Pearson Correlation	.573**	.613**	1
	Sig. (2-tailed)	.000	.000	
	N	64	64	64

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

Correlations

		(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	(DQ3) I think that the standard of the dishes in the restaurant is of (blank) quality
(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	Pearson Correlation	1	.447**	.418**
	Sig. (2-tailed)		.000	.001
	N	65	65	65
(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	Pearson Correlation	.447**	1	.555**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(DQ3) I think that the standard of the dishes in the restaurant is of (blank)quality	Pearson Correlation	.418**	.555**	1
	Sig. (2-tailed)	.001	.000	
	N	65	65	65

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

Correlations

		(P1) I think that the average price of the menu is in the (blank) scale	(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	(P3) The menu made it look like the dishes were of (blank) price range
(P1) I think that the average price of the menu is in the (blank) scale	Pearson Correlation	1	.445**	.385**
	Sig. (2-tailed)		.000	.002
	N	65	65	65
(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	Pearson Correlation	.445**	1	.653**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(P3) The menu made it look like the dishes were of (blank) price range	Pearson Correlation	.385**	.653**	1
	Sig. (2-tailed)	.002	.000	
	N	65	65	65

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

M2T1 Correlation of Indicators

Correlations

		(W1) I find the menu heavy and hard to raise	(W2)The menu is made of heavy materials	(W3) It is difficult to lift up the menu due to its weight
(W1) I find the menu heavy and hard to raise	Pearson Correlation	1	.568**	.232
	Sig. (2-tailed)		.000	.067
	N	63	63	63
(W2)The menu is made of heavy materials	Pearson Correlation	.568**	1	.429**
	Sig. (2-tailed)	.000		.000
	N	63	65	65
(W3) It is difficult to lift up the menu due to its weight	Pearson Correlation	.232	.429**	1
	Sig. (2-tailed)	.067	.000	
	N	63	65	65

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

Correlations

		(S1)I find the dimensions of the menu pretty big	(S2) I find the menu's size bigger than my field of vision	(S3) I find the menu's folds/pages bulky
(S1)I find the dimensions of the menu pretty big	Pearson Correlation	1	.577**	.254*
	Sig. (2-tailed)		.000	.041
	N	65	65	65
(S2) I find the menu's size bigger than my field of vision	Pearson Correlation	.577**	1	.420**
	Sig. (2-tailed)	.000		.001
	N	65	65	65
(S3) I find the menu's folds/pages bulky	Pearson Correlation	.254*	.420**	1
	Sig. (2-tailed)	.041	.001	
	N	65	65	65

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

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

Correlations

		(Q1) I think that the covering and paper of the menu is made from (blank) quality	(Q2) The menu cover is made from a (blank) standard of material	(Q3) I find the menu materials is made from (blank) quality
(Q1) I think that the covering and paper of the menu is made from (blank) quality	Pearson Correlation	1	.903**	.700**
	Sig. (2-tailed)		.000	.000
	N	65	65	65
(Q2) The menu cover is made from a (blank) standard of material	Pearson Correlation	.903**	1	.766**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(Q3) I find the menu materials is made from (blank) quality	Pearson Correlation	.700**	.766**	1
	Sig. (2-tailed)	.000	.000	
	N	65	65	65

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

Correlations

		(E1) I find the menu relatively easy to navigate through the dishes	(E2) I didn't have a hard time looking around the menu items	(E3) Scanning through the menu items are easy and hassle-free
(E1) I find the menu relatively easy to navigate through the dishes	Pearson Correlation	1	.467**	.496**
	Sig. (2-tailed)		.000	.000
	N	65	65	65
(E2) I didn't have a hard time looking around the menu items	Pearson Correlation	.467**	1	.401**
	Sig. (2-tailed)	.000		.001
	N	65	65	65
(E3) Scanning through the menu items are easy and hassle-free	Pearson Correlation	.496**	.401**	1
	Sig. (2-tailed)	.000	.001	
	N	65	65	65

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

Correlations

		(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	(DQ3) I think that the standard of the dishes in the restaurant is of (blank) quality
(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	Pearson Correlation	1	.503**	.587**
	Sig. (2-tailed)		.000	.000
	N	65	65	65
(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	Pearson Correlation	.503**	1	.806**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(DQ3) I think that the standard of the dishes in the restaurant is of (blank)quality	Pearson Correlation	.587**	.806**	1
	Sig. (2-tailed)	.000	.000	
	N	65	65	65

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

Correlations

		(P1) I think that the average price of the menu is in the (blank) scale	(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	(P3) The menu made it look like the dishes were of (blank) price range
(P1) I think that the average price of the menu is in the (blank) scale	Pearson Correlation	1	.539**	.571**
	Sig. (2-tailed)		.000	.000
	N	65	65	65
(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	Pearson Correlation	.539**	1	.711**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(P3) The menu made it look like the dishes were of (blank) price range	Pearson Correlation	.571**	.711**	1
	Sig. (2-tailed)	.000	.000	
	N	65	65	65

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

Correlation of Indicators - M2T2

Correlations

		(W1) I find the menu heavy and hard to raise	(W2)The menu is made of heavy materials	(W3) It is difficult to lift up the menu due to its weight
(W1) I find the menu heavy and hard to raise	Pearson Correlation	1	.464**	.473**
	Sig. (2-tailed)		.000	.000
	N	65	65	65
(W2)The menu is made of heavy materials	Pearson Correlation	.464**	1	.474**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(W3) It is difficult to lift up the menu due to its weight	Pearson Correlation	.473**	.474**	1
	Sig. (2-tailed)	.000	.000	
	N	65	65	65

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

Correlations

		(S1)I find the dimensions of the menu pretty big	(S2) I find the menu's size bigger than my field of vision	(S3) I find the menu's folds/pages bulky
(S1)I find the dimensions of the menu pretty big	Pearson Correlation	1	.319**	.264*
	Sig. (2-tailed)		.010	.035
	N	65	65	64
(S2) I find the menu's size bigger than my field of vision	Pearson Correlation	.319**	1	.295*
	Sig. (2-tailed)	.010		.018
	N	65	65	64
(S3) I find the menu's folds/pages bulky	Pearson Correlation	.264*	.295*	1
	Sig. (2-tailed)	.035	.018	
	N	64	64	64

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

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

Correlations

		(Q1) I think that the covering and paper of the menu is made from (blank) quality	(Q2) The menu cover is made from a (blank) standard of material	(Q3) I find the menu materials is made from (blank) quality
(Q1) I think that the covering and paper of the menu is made from (blank) quality	Pearson Correlation	1	.726**	.732**
	Sig. (2-tailed)		.000	.000
	N	65	65	65
(Q2) The menu cover is made from a (blank) standard of material	Pearson Correlation	.726**	1	.644**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(Q3) I find the menu materials is made from (blank) quality	Pearson Correlation	.732**	.644**	1
	Sig. (2-tailed)	.000	.000	
	N	65	65	65

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

Correlations

		(E1) I find the menu relatively easy to navigate through the dishes	(E2) I didn't have a hard time looking around the menu items	(E3) Scanning through the menu items are easy and hassle-free
(E1) I find the menu relatively easy to navigate through the dishes	Pearson Correlation	1	.173	.120
	Sig. (2-tailed)		.167	.343
	N	65	65	65
(E2) I didn't have a hard time looking around the menu items	Pearson Correlation	.173	1	.321**
	Sig. (2-tailed)	.167		.009
	N	65	65	65
(E3) Scanning through the menu items are easy and hassle-free	Pearson Correlation	.120	.321**	1
	Sig. (2-tailed)	.343	.009	
	N	65	65	65

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

Correlations

		(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	(DQ3) I think that the standard of the dishes in the restaurant is of (blank) quality
(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	Pearson Correlation	1	.516**	.404**
	Sig. (2-tailed)		.000	.001
	N	65	65	65
(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	Pearson Correlation	.516**	1	.641**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(DQ3) I think that the standard of the dishes in the restaurant is of (blank)quality	Pearson Correlation	.404**	.641**	1
	Sig. (2-tailed)	.001	.000	
	N	65	65	65

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

Correlations

		(P1) I think that the average price of the menu is in the (blank) scale	(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	(P3) The menu made it look like the dishes were of (blank) price range
(P1) I think that the average price of the menu is in the (blank) scale	Pearson Correlation	1	.404**	.418**
	Sig. (2-tailed)		.001	.001
	N	65	65	65
(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	Pearson Correlation	.404**	1	.592**
	Sig. (2-tailed)	.001		.000
	N	65	65	65
(P3) The menu made it look like the dishes were of (blank) price range	Pearson Correlation	.418**	.592**	1
	Sig. (2-tailed)	.001	.000	
	N	65	65	65

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

Correlation of Indicators – M3T1

Correlations

		(W1) I find the menu heavy and hard to raise	(W2)The menu is made of heavy materials	(W3) It is difficult to lift up the menu due to its weight
(W1) I find the menu heavy and hard to raise	Pearson Correlation	1	.411**	.360**
	Sig. (2-tailed)		.001	.003
	N	65	65	65
(W2)The menu is made of heavy materials	Pearson Correlation	.411**	1	.478**
	Sig. (2-tailed)	.001		.000
	N	65	65	65
(W3) It is difficult to lift up the menu due to its weight	Pearson Correlation	.360**	.478**	1
	Sig. (2-tailed)	.003	.000	
	N	65	65	65

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

Correlations

		(S1)I find the dimensions of the menu pretty big	(S2) I find the menu's size bigger than my field of vision	(S3) I find the menu's folds/pages bulky
(S1)I find the dimensions of the menu pretty big	Pearson Correlation	1	.492**	.180
	Sig. (2-tailed)		.000	.151
	N	65	64	65
(S2) I find the menu's size bigger than my field of vision	Pearson Correlation	.492**	1	-.002
	Sig. (2-tailed)	.000		.985
	N	64	64	64
(S3) I find the menu's folds/pages bulky	Pearson Correlation	.180	-.002	1
	Sig. (2-tailed)	.151	.985	
	N	65	64	65

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

Correlations

		(Q1) I think that the covering and paper of the menu is made from (blank) quality	(Q2) The menu cover is made from a (blank) standard of material	(Q3) I find the menu materials is made from (blank) quality
(Q1) I think that the covering and paper of the menu is made from (blank) quality	Pearson Correlation	1	.659**	.606**
	Sig. (2-tailed)		.000	.000
	N	65	65	65
(Q2) The menu cover is made from a (blank) standard of material	Pearson Correlation	.659**	1	.505**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(Q3) I find the menu materials is made from (blank) quality	Pearson Correlation	.606**	.505**	1
	Sig. (2-tailed)	.000	.000	
	N	65	65	65

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

Correlations

		(E1) I find the menu relatively easy to navigate through the dishes	(E2) I didn't have a hard time looking around the menu items	(E3) Scanning through the menu items are easy and hassle-free
(E1) I find the menu relatively easy to navigate through the dishes	Pearson Correlation	1	.552**	.629**
	Sig. (2-tailed)		.000	.000
	N	65	65	65
(E2) I didn't have a hard time looking around the menu items	Pearson Correlation	.552**	1	.498**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(E3) Scanning through the menu items are easy and hassle-free	Pearson Correlation	.629**	.498**	1
	Sig. (2-tailed)	.000	.000	
	N	65	65	65

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

Correlations

		(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	(DQ3) I think that the standard of the dishes in the restaurant is of (blank) quality
(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	Pearson Correlation	1	.497**	.394**
	Sig. (2-tailed)		.000	.001
	N	65	65	65
(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	Pearson Correlation	.497**	1	.641**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(DQ3) I think that the standard of the dishes in the restaurant is of (blank)quality	Pearson Correlation	.394**	.641**	1
	Sig. (2-tailed)	.001	.000	
	N	65	65	65

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

Correlations

		(P1) I think that the average price of the menu is in the (blank) scale	(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	(P3) The menu made it look like the dishes were of (blank) price range
(P1) I think that the average price of the menu is in the (blank) scale	Pearson Correlation	1	.423**	.349**
	Sig. (2-tailed)		.000	.005
	N	65	65	64
(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	Pearson Correlation	.423**	1	.538**
	Sig. (2-tailed)	.000		.000
	N	65	65	64
(P3) The menu made it look like the dishes were of (blank) price range	Pearson Correlation	.349**	.538**	1
	Sig. (2-tailed)	.005	.000	
	N	64	64	64

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

Correlation of Indicators – M3T2

Correlations

		(W1) I find the menu heavy and hard to raise	(W2)The menu is made of heavy materials	(W3) It is difficult to lift up the menu due to its weight
(W1) I find the menu heavy and hard to raise	Pearson Correlation	1	.438**	.594**
	Sig. (2-tailed)		.000	.000
	N	65	65	65
(W2)The menu is made of heavy materials	Pearson Correlation	.438**	1	.481**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(W3) It is difficult to lift up the menu due to its weight	Pearson Correlation	.594**	.481**	1
	Sig. (2-tailed)	.000	.000	
	N	65	65	65

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

Correlations

		(S1)I find the dimensions of the menu pretty big	(S2) I find the menu's size bigger than my field of vision	(S3) I find the menu's folds/pages bulky
(S1)I find the dimensions of the menu pretty big	Pearson Correlation	1	.591**	.297*
	Sig. (2-tailed)		.000	.016
	N	65	65	65
(S2) I find the menu's size bigger than my field of vision	Pearson Correlation	.591**	1	.263*
	Sig. (2-tailed)	.000		.035
	N	65	65	65
(S3) I find the menu's folds/pages bulky	Pearson Correlation	.297*	.263*	1
	Sig. (2-tailed)	.016	.035	
	N	65	65	65

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

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

Correlations

		(Q1) I think that the covering and paper of the menu is made from (blank) quality	(Q2) The menu cover is made from a (blank) standard of material	(Q3) I find the menu materials is made from (blank) quality
(Q1) I think that the covering and paper of the menu is made from (blank) quality	Pearson Correlation	1	.595**	.279*
	Sig. (2-tailed)		.000	.026
	N	65	65	64
(Q2) The menu cover is made from a (blank) standard of material	Pearson Correlation	.595**	1	.402**
	Sig. (2-tailed)	.000		.001
	N	65	65	64
(Q3) I find the menu materials is made from (blank) quality	Pearson Correlation	.279*	.402**	1
	Sig. (2-tailed)	.026	.001	
	N	64	64	64

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

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

Correlations

		(E1) I find the menu relatively easy to navigate through the dishes	(E2) I didn't have a hard time looking around the menu items	(E3) Scanning through the menu items are easy and hassle-free
(E1) I find the menu relatively easy to navigate through the dishes	Pearson Correlation	1	.564**	.270*
	Sig. (2-tailed)		.000	.030
	N	65	65	65
(E2) I didn't have a hard time looking around the menu items	Pearson Correlation	.564**	1	.468**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(E3) Scanning through the menu items are easy and hassle-free	Pearson Correlation	.270*	.468**	1
	Sig. (2-tailed)	.030	.000	
	N	65	65	65

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

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

Correlations

		(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	(DQ3) I think that the standard of the dishes in the restaurant is of (blank) quality
(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	Pearson Correlation	1	.540**	.565**
	Sig. (2-tailed)		.000	.000
	N	65	65	65
(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	Pearson Correlation	.540**	1	.763**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(DQ3) I think that the standard of the dishes in the restaurant is of (blank)quality	Pearson Correlation	.565**	.763**	1
	Sig. (2-tailed)	.000	.000	
	N	65	65	65

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

Correlations

		(P1) I think that the average price of the menu is in the (blank) scale	(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	(P3) The menu made it look like the dishes were of (blank) price range
(P1) I think that the average price of the menu is in the (blank) scale	Pearson Correlation	1	.539**	.446**
	Sig. (2-tailed)		.000	.000
	N	65	65	65
(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	Pearson Correlation	.539**	1	.585**
	Sig. (2-tailed)	.000		.000
	N	65	65	65
(P3) The menu made it look like the dishes were of (blank) price range	Pearson Correlation	.446**	.585**	1
	Sig. (2-tailed)	.000	.000	
	N	65	65	65

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

Appendix C

Cronbach's Alpha if Item is Deleted

Cronbach's Alpha if Item is Deleted M1T1 (Cronbach's Alpha of .799)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(W1) I find the menu heavy and hard to raise	76.78	87.922	.497	.782
(W2)The menu is made of heavy materials	76.52	85.910	.466	.784
(W3) It is difficult to lift up the menu due to its weight	77.20	94.006	.233	.801
(S1)I find the dimensions of the menu pretty big	75.17	85.268	.427	.789
(S2) I find the menu's size bigger than my field of vision	75.74	88.852	.319	.799
(S3) I find the menu's folds/pages bulky	76.88	89.860	.376	.791
(Q1) I think that the covering and paper of the menu is made from (blank) quality	73.97	96.687	.310	.794
(Q2) The menu cover is made from a (blank) standard of material	74.05	95.013	.420	.790
(Q3) I find the menu materials is made from (blank) quality	73.89	93.160	.538	.784
(E1) I find the menu relatively easy to navigate through the dishes	73.17	93.674	.392	.790
(E2) I didn't have a hard time looking around the menu items	73.26	97.352	.146	.805
(E3) Scanning through the menu items are easy and hassle-free	73.17	91.799	.460	.786
(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	73.62	90.053	.504	.782
(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	73.91	95.023	.365	.791
(DQ3) I think that the standard of the dishes in the restaurant is of (blank)quality	73.75	95.251	.401	.790
(P1) I think that the average price of the menu is in the (blank) scale	74.91	96.054	.264	.796
(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	74.60	92.400	.516	.784
(P3) The menu made it look like the dishes were of (blank) price range	74.51	91.504	.589	.781

Cronbach's Alpha if Item is Deleted M1T2 (Cronbach's Alpha of .682)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(W1) I find the menu heavy and hard to raise	79.92	67.171	.385	.654
(W2)The menu is made of heavy materials	79.86	63.092	.501	.634
(W3) It is difficult to lift up the menu due to its weight	80.62	71.433	.294	.667
(S1)I find the dimensions of the menu pretty big	78.73	65.039	.431	.646
(S2) I find the menu's size bigger than my field of vision	79.13	65.500	.408	.650
(S3) I find the menu's folds/pages bulky	79.70	67.343	.340	.661
(Q1) I think that the covering and paper of the menu is made from (blank) quality	77.17	77.050	.144	.681
(Q2) The menu cover is made from a (blank) standard of material	77.08	76.461	.172	.679
(Q3) I find the menu materials is made from (blank) quality	77.05	74.820	.346	.666
(E1) I find the menu relatively easy to navigate through the dishes	76.44	81.348	-.121	.701
(E2) I didn't have a hard time looking around the menu items	76.87	79.242	-.026	.701
(E3) Scanning through the menu items are easy and hassle-free	76.71	79.433	-.028	.699
(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	76.92	76.236	.119	.685
(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	77.22	73.047	.427	.659
(DQ3) I think that the standard of the dishes in the restaurant is of (blank)quality	77.16	75.265	.290	.670
(P1) I think that the average price of the menu is in the (blank) scale	78.35	73.715	.372	.663
(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	78.10	72.055	.441	.656
(P3) The menu made it look like the dishes were of (blank) price range	78.03	73.451	.355	.663

Cronbach's Alpha if Item is Deleted M2T1 (Cronbach's Alpha of .845)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(W1) I find the menu heavy and hard to raise	76.67	133.323	.290	.844
(W2)The menu is made of heavy materials	76.25	128.128	.376	.842
(W3) It is difficult to lift up the menu due to its weight	76.78	137.176	.125	.854
(S1)I find the dimensions of the menu pretty big	74.56	118.832	.541	.833
(S2) I find the menu's size bigger than my field of vision	75.54	123.317	.446	.839
(S3) I find the menu's folds/pages bulky	76.60	134.630	.211	.849
(Q1) I think that the covering and paper of the menu is made from (blank) quality	73.57	127.152	.561	.832
(Q2) The menu cover is made from a (blank) standard of material	73.54	128.833	.572	.832
(Q3) I find the menu materials is made from (blank) quality	73.46	128.156	.611	.831
(E1) I find the menu relatively easy to navigate through the dishes	72.95	132.304	.354	.841
(E2) I didn't have a hard time looking around the menu items	72.83	129.275	.457	.837
(E3) Scanning through the menu items are easy and hassle-free	72.73	133.394	.338	.842
(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	73.43	123.604	.578	.830
(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	73.25	127.289	.684	.829
(DQ3) I think that the standard of the dishes in the restaurant is of (blank)quality	73.40	126.437	.682	.828
(P1) I think that the average price of the menu is in the (blank) scale	74.56	134.799	.333	.842
(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	74.41	130.182	.578	.833
(P3) The menu made it look like the dishes were of (blank) price range	74.43	126.700	.594	.831

Cronbach's Alpha if Item is Deleted M2T2 (Cronbach's Alpha of .702)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(W1) I find the menu heavy and hard to raise	84.05	61.474	.240	.696
(W2)The menu is made of heavy materials	83.03	51.904	.569	.647
(W3) It is difficult to lift up the menu due to its weight	83.81	59.361	.282	.692
(S1)I find the dimensions of the menu pretty big	82.63	62.397	.188	.703
(S2) I find the menu's size bigger than my field of vision	82.91	53.896	.470	.664
(S3) I find the menu's folds/pages bulky	83.38	59.857	.293	.690
(Q1) I think that the covering and paper of the menu is made from (blank) quality	81.36	63.821	.327	.688
(Q2) The menu cover is made from a (blank) standard of material	81.48	64.000	.308	.689
(Q3) I find the menu materials is made from (blank) quality	81.42	63.327	.403	.684
(E1) I find the menu relatively easy to navigate through the dishes	81.14	66.408	.096	.705
(E2) I didn't have a hard time looking around the menu items	81.02	66.397	.070	.709
(E3) Scanning through the menu items are easy and hassle-free	81.09	69.642	-.126	.722
(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	81.23	62.944	.341	.686
(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	81.48	63.270	.335	.687
(DQ3) I think that the standard of the dishes in the restaurant is of (blank)quality	81.41	61.832	.448	.678
(P1) I think that the average price of the menu is in the (blank) scale	82.69	64.028	.289	.690
(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	82.33	61.303	.460	.676
(P3) The menu made it look like the dishes were of (blank) price range	82.28	64.142	.249	.693

Cronbach's Alpha if Item is Deleted M3T1 (Cronbach's Alpha of .553)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(W1) I find the menu heavy and hard to raise	79.49	45.544	.019	.575
(W2)The menu is made of heavy materials	79.22	42.563	.187	.539
(W3) It is difficult to lift up the menu due to its weight	79.83	44.953	.093	.556
(S1)I find the dimensions of the menu pretty big	77.41	37.988	.339	.502
(S2) I find the menu's size bigger than my field of vision	77.60	41.759	.152	.552
(S3) I find the menu's folds/pages bulky	78.89	44.068	.080	.565
(Q1) I think that the covering and paper of the menu is made from (blank) quality	76.44	43.348	.356	.518
(Q2) The menu cover is made from a (blank) standard of material	76.48	41.705	.468	.500
(Q3) I find the menu materials is made from (blank) quality	76.35	44.070	.365	.522
(E1) I find the menu relatively easy to navigate through the dishes	75.86	44.253	.185	.539
(E2) I didn't have a hard time looking around the menu items	75.79	43.618	.226	.532
(E3) Scanning through the menu items are easy and hassle-free	75.89	44.584	.148	.545
(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	76.11	44.939	.178	.541
(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	76.27	42.781	.389	.512
(DQ3) I think that the standard of the dishes in the restaurant is of (blank)quality	76.32	43.575	.387	.518
(P1) I think that the average price of the menu is in the (blank) scale	77.60	47.469	-.022	.565
(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	77.40	46.340	.085	.552
(P3) The menu made it look like the dishes were of (blank) price range	77.27	45.491	.108	.551

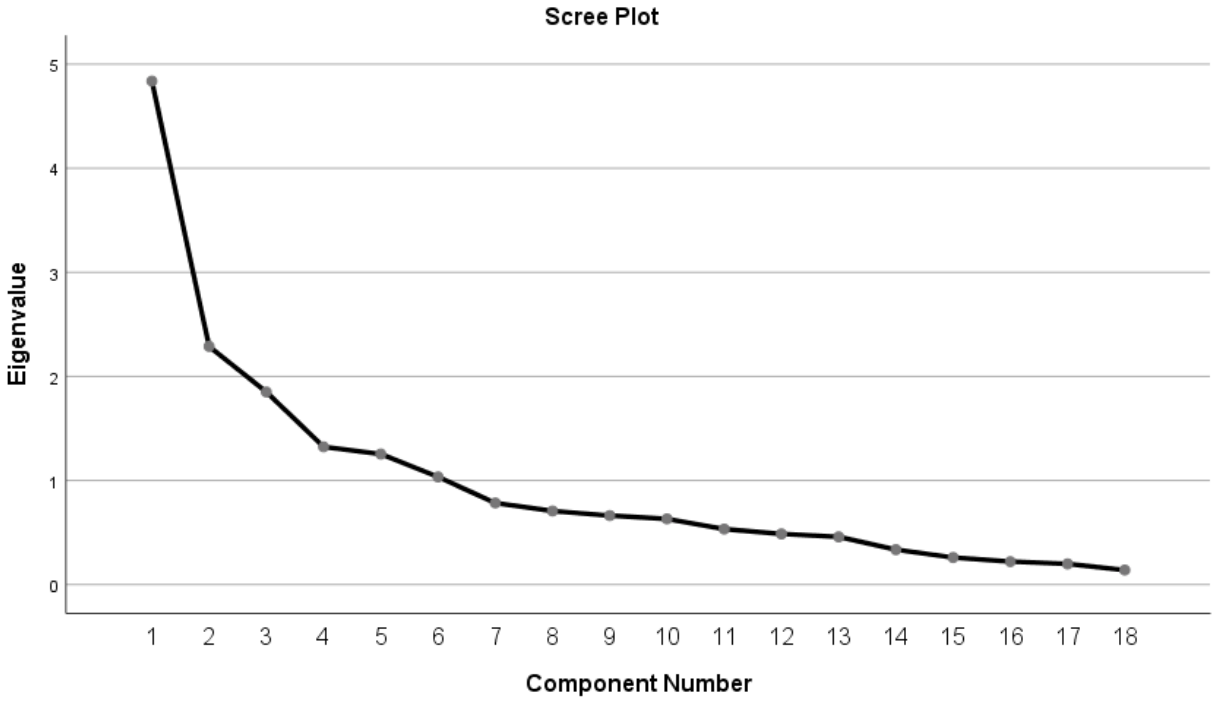
Cronbach's Alpha if Item is Deleted M3T2 (Cronbach's Alpha of .770)

Item-Total Statistics

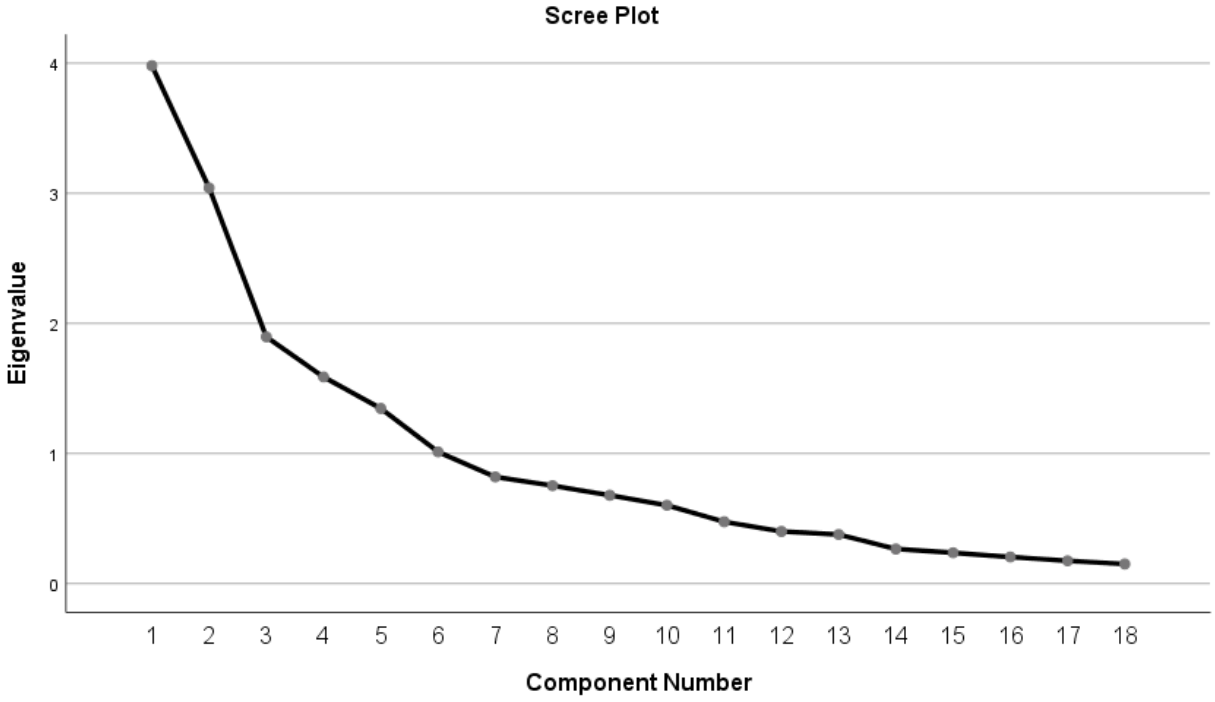
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(W1) I find the menu heavy and hard to raise	89.02	103.254	.439	.751
(W2)The menu is made of heavy materials	88.52	104.635	.494	.747
(W3) It is difficult to lift up the menu due to its weight	88.84	101.213	.410	.755
(S1)I find the dimensions of the menu pretty big	89.08	105.121	.454	.750
(S2) I find the menu's size bigger than my field of vision	89.19	101.774	.474	.748
(S3) I find the menu's folds/pages bulky	88.75	108.571	.330	.761
(Q1) I think that the covering and paper of the menu is made from (blank) quality	87.78	118.840	.061	.775
(Q2) The menu cover is made from a (blank) standard of material	87.75	116.413	.233	.767
(Q3) I find the menu materials is made from (blank) quality	87.80	113.879	.398	.760
(E1) I find the menu relatively easy to navigate through the dishes	88.02	107.698	.340	.760
(E2) I didn't have a hard time looking around the menu items	88.06	109.329	.293	.764
(E3) Scanning through the menu items are easy and hassle-free	88.20	111.180	.274	.765
(DQ1) I think that the food will be prepared with fresh and top (blank) quality products	87.70	107.387	.457	.751
(DQ2) After seeing the menu, I think that the food is prepared by (blank) professional food handlers	87.83	113.383	.285	.764
(DQ3) I think that the standard of the dishes in the restaurant is of (blank)quality	87.80	113.276	.293	.763
(P1) I think that the average price of the menu is in the (blank) scale	88.98	111.603	.281	.764
(P2) After seeing the menu, I think that the food is made from (blank) products/raw materials	88.59	109.959	.408	.756
(P3) The menu made it look like the dishes were of (blank) price range	88.39	112.781	.297	.763

Appendix D

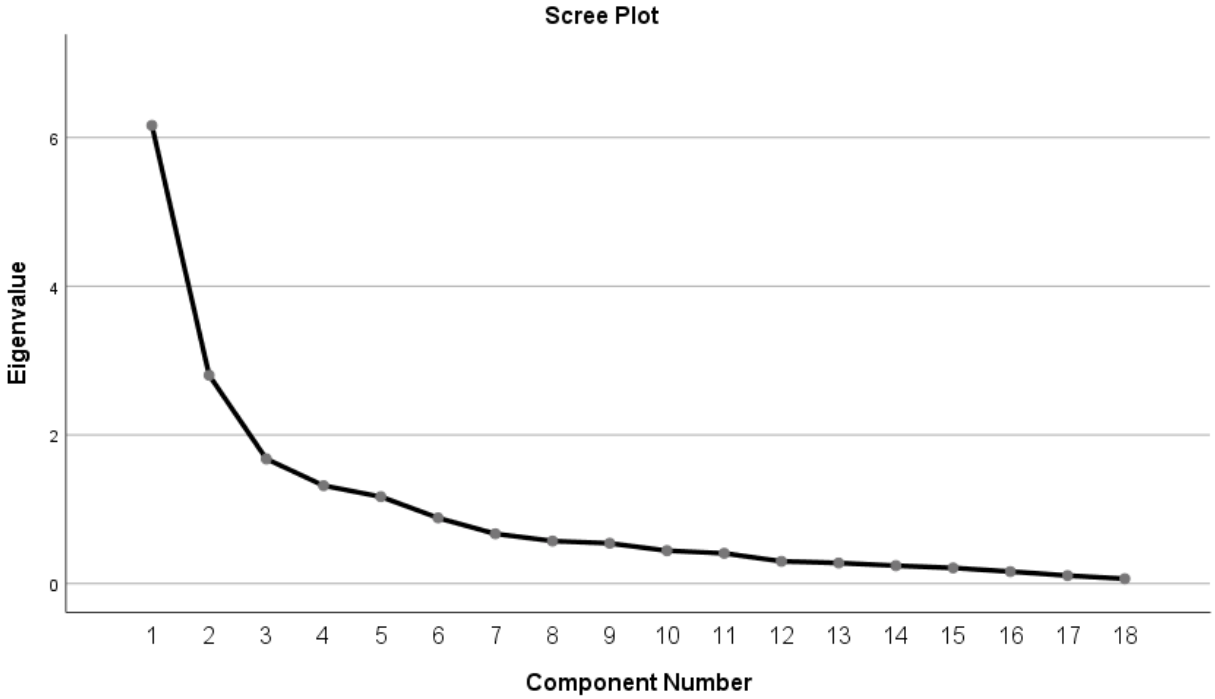
Scree Plot - Factor Analysis M1T1



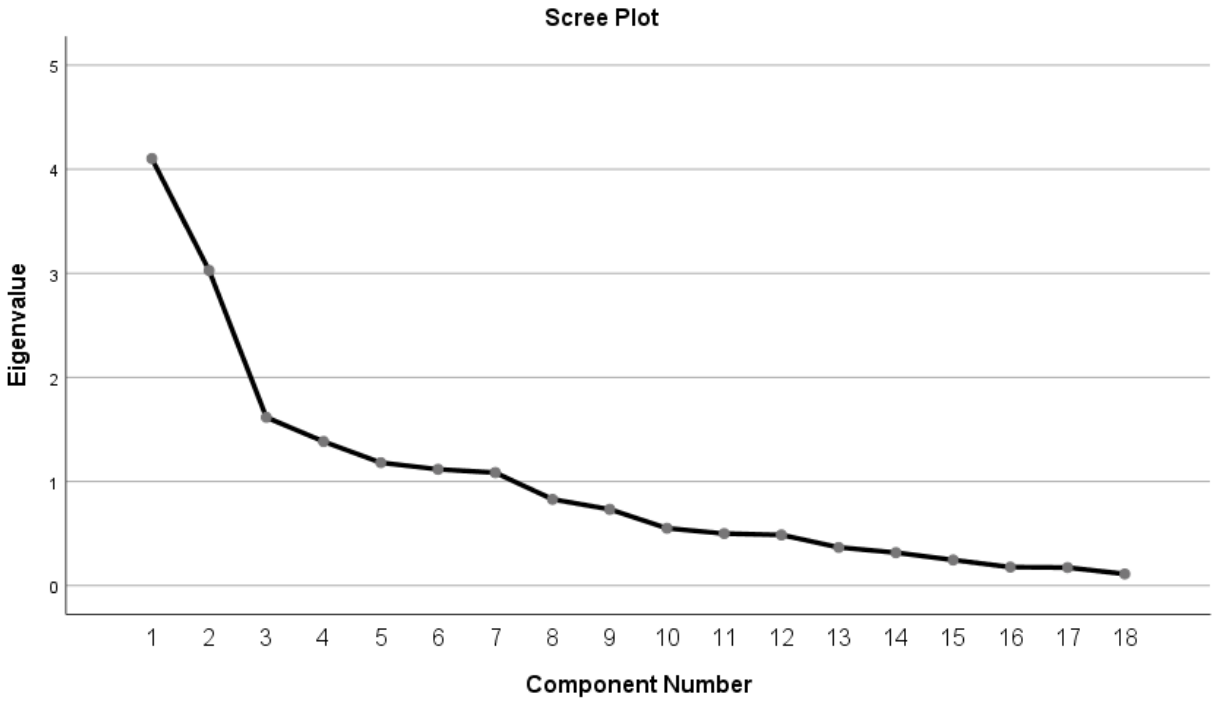
Scree Plot - Factor Analysis M1T2



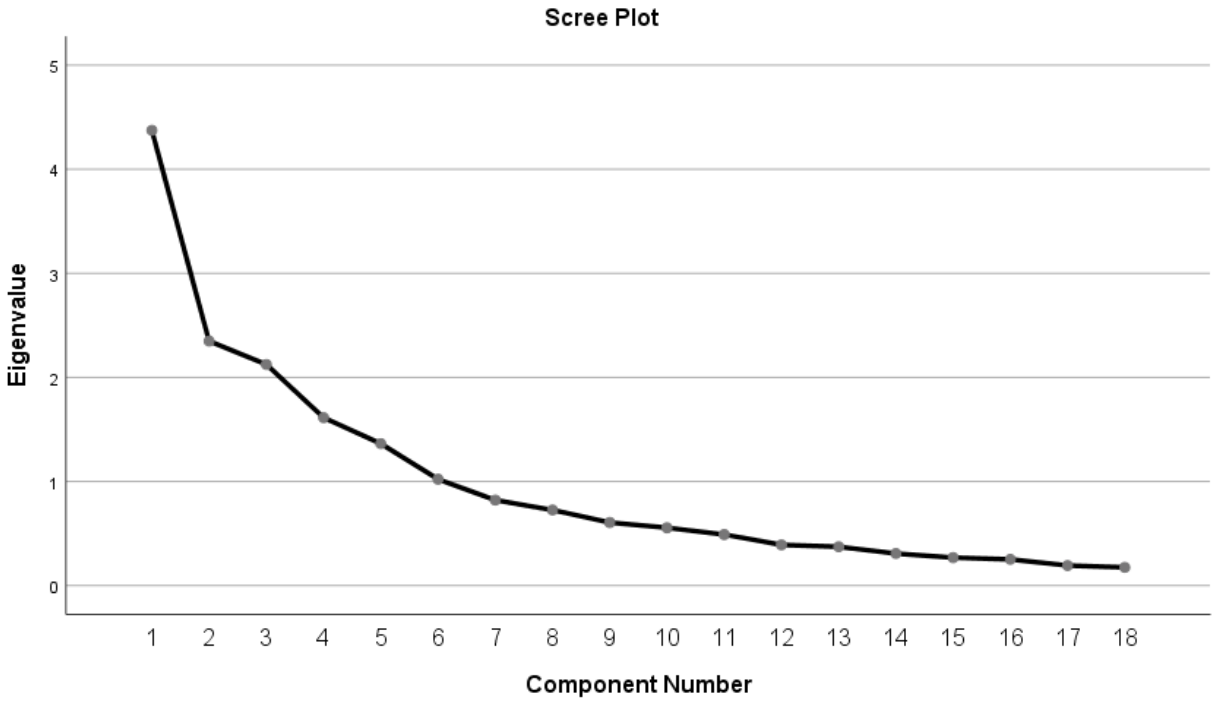
Scree Plot - Factor Analysis M2T1



Scree Plot - Factor Analysis M2T2



Scree Plot - Factor Analysis M3T1



Scree Plot - Factor Analysis M3T2