

南華大學管理學院企業管理學系管理科學碩士班

碩士論文

Master Program in Management Sciences

Department of Business Administration

College of Management

Nanhua University

Master Thesis

台灣印度餐廳當地人和外籍人士服務質量績效分析的重要性
Importance of Performance Analysis of Service Quality for Locals
and Expats of Indian Restaurants in Taiwan

溫宇恆

Bapi Das

指導教授：郭東昇 博士

Advisor: Tung-Sheng Kuo, Ph.D.

中華民國 111 年 6 月

June 2022

南 華 大 學
企 業 管 理 學 系 管 理 科 學 碩 士 班
碩 士 學 位 論 文

台灣印度餐廳當地人和外籍人士服務質量績效分析的重要性
Importance of Performance Analysis of Service Quality for Locals and
Expats of Indian Restaurants in Taiwan

研 究 生：Bani Sar 溫宇恆

經考試合格特此證明

口試委員：張德發
李永勇
郭東昇

指導教授：郭東昇

系主任(所長)：黃國忠

口試日期：中華民國 110 年 10 月 05 日

準碩士推薦函


本校企業管理學系管理科學碩士班研究生 Bapi Das 君
在本系修業 年，已經完成本系碩士班規定之修業課程及論文研究之訓練。

- 1、在修業課程方面：Bapi Das 君已修滿36學分，其中必修科目：研究方法、管理科學、行銷管理專題、企業倫理專題等科目，成績及格。
- 2、在論文研究方面：Bapi Das 君在學期間已完成下列論文：
 - (1) 碩士論文：Importance of Performance Analysis of Service quality for Locals and Expats of Indian Restaurants in Taiwan
 - (2) 學術期刊：Praxis International Journal of Social Science and

Literature

本人認為Bapi Das 君已完成南華大學企業管理學系管理科學碩士班之碩士養成教育，符合訓練水準，並具備本校碩士學位考試之申請資格，特向碩士資格審查小組推薦其初稿，名稱：Importance of Performance Analysis of Service quality for Locals and Expats of Indian Restaurants in Taiwan

，以參加碩士論文口試。

指導教授： 簽章

中華民國 110 年 8 月 20 日

ACKNOWLEDGEMENT

Firstly, I would like to direct my earnest gratitude to my advisor Professor Tung-Sheng Kuo, Ph.D., for his guidance, kindness, patience, time, and utmost effort during the whole process of my dissertation writing process.

Secondly, besides our advisor, I would like to say thanks to all my friends for all their advice as well, as the owner of "Chilliesine Indian Restaurant," Mr Minesh, for helping me throughout my thesis process. I would now like to show my gratitude and thank my classmates, who gave me much help, encouraged me to do better and more in preparation for this dissertation, shared experience with the research of statistical analysis patiently corrected grammar and writing styles for my thesis.

Thirdly, it would not have been possible to complete the thesis without the support of my family, beloved person, and friends in India who always believe, encourage, and support me.

Finally, I also want to thank the respondents who are helping me fill out the questionnaire.

Bapi Das

南華大學管理學院企業管理學系管理科學碩士班

110 學年度第 2 學期碩士論文摘要

論文題目：台灣印度餐廳當地人和外籍人士服務質量績效分析的重要性

研究生： Bapi Das

指導教師：郭東昇 博士

論文摘要內容

在最近的時代，服務品質在每個組織中都發揮了關鍵作用。不可否認，每家公司在市場上生存的主要原因是客戶，贏得他們的利益是最重要的並且是公司及其管理層獲得超越同行競爭優勢的絕對先決條件。然而，許多因素會影響到行銷環境中客戶的滿意度。因此，本研究主要依賴於揭示和擴展客戶對服務品質的感知。

以下研究旨在衡量位於臺灣台中市的 Chilliesine 印度餐廳的服務品質表現。本研究有兩個研究目的，它旨在衡量餐飲業顧客的看法，並檢驗 DINESERV 在東亞文化背景下的有效性。採用重要性績效分析方法來區分四個不同維度的基礎研究。重要性績效分析方法已用於瞭解每個服務專案的服務績效。此外，因數分析和 Cronbach's alpha 被用來分別檢查模型的有效性和可靠性。I 重要性績效分析，作為一種行銷工具，被用來為管理者做出決策提供生動的畫面，瞭解他們的競爭優勢，並在其他方面進行改進。

理論研究結果表明，DINESERV 是衡量臺灣餐館服務品質的正確工具。

而實際意義上認可，臺灣的 Chilliesine 餐廳有一個劣質的維度，需要不斷改進。最後，受訪者的人口統計學特徵顯示，大多數客戶被歸入年齡組（即 30-35 歲），公司可以把這些資訊用於行銷目的。本研究在服務品質的背景下，評估和分析了台中市顧客所期望的服務品質。

關鍵字：重要性績效分析、客戶滿意度、客戶品質

ABSTRACT

In the past few years, service quality has become particularly crucial for every firm. There is no refuting that customers are the most crucial component in a company's survival of the company, and gaining their focus is important for the firm and its management to establish a competitive advantage over its competitors. Client joy is driven by a range of factors in the marketing environment. As a result, the objective of this article is to learn about or expand client evaluation of service quality.

The purpose of this study was to examine the service quality of Chilliesine Indian restaurants in Taiwan's Taichung city. This study has two main objectives: it will evaluate consumer attitudes in the restaurants, and it will test the validity of DINESERV in an East Asian cultural environment. Importance To separate the basic research in four different dimensions, the performance analysis methodology is being used.

To understand the service performance of each service item, the important performance analysis (IPA) methodology was used. The validity and reliability of the model were also tested using factor analysis and Cronbach's alpha, respectively. IPA, a marketing tool, was utilized to provide managers with a visual image in order for them to make decisions, grasp their competitive edge, and improve on the rest.

According to the theoretical findings, DINESERV is the best instrument that measures restaurant service quality in Taiwan. And the practical implication is that the Chilliesine restaurant in Taiwan has one weak point that needs to be fixed. Lastly, the demographic characteristics of the respondents show that the majority of the consumers are in the 30-35 bracket, and this information can be used by the company for marketing purposes. In

the context of service quality, the research investigates and analyses the customer's desired service quality in Taichung city.

Keywords: Importance performance Analysis, Customer satisfaction, Service quality, DINERSERV



TABLE OF CONTENTS

準碩士推薦函	I
ACKNOWLEDGEMENT	II
論文摘要	III
ABSTRACT	IV
TABLE OF CONTENTS	VI
LIST OF FIGURES.....	IX
LIST OF TABLES.....	X
CHAPTER ONE INTRODUCTION	1
1.1 RESEARCH BACKGROUND AND MOTIVATION	1
1.2 RESEARCH PURPOSE OR RESEARCH GAP.....	5
1.3 RESEARCH OBJECTIVES.....	5
1.4 RESEARCH PROJECT AND SCOPE OF THE STUDY.....	6
1.5 THE STRUCTURE OF THE RESEARCH.....	6
CHAPTER TWO LITERATURE REVIEW.....	8
2.1 THE CONCEPT OF SERVICE	8
2.2 QUALITY OF SERVICE.....	10
2.3 SERVICE QUALITY AND SATISFACTION CUSTOMER.....	12
2.4 FACTORS AFFECTING CUSTOMER SATISFACTION	14
2.5 SERVICE QUALITY MODEL.....	17
2.6 SERVICESCAPE.....	18
2.7 FIVE-ASPECT MEAL MODEL (FAMM).....	18
2.8 SERVQUAL.....	19
2.8.1 <i>Consumer expectation management perception gap</i>	19
2.8.2 <i>Management perception of the gap in service quality specifications</i>	19
2.8.3 <i>Service delivery External communication gap</i>	20
2.8.4 <i>Perceived service gap with expected service</i>	20
2.9 LODGESERV	21
2.10 DINESERV	22
2.11 THE CONCEPTUAL FRAMEWORK.....	25
2.12 IMPORTANCE OF PERFORMANCE ANALYSIS	27

2.13	DEFINED DIMENSIONS OF DINESERV, ATTRIBUTES OF SERVICE QUALITY	29
2.14	RELIABILITY	30
2.15	RESPONSIVENESS	30
2.16	ASSURANCE	30
2.17	EMPATHY	30
2.18	TANGIBLES.....	31
2.19	CASE STUDY: CHILLIESINE INDIAN RESTAURANT	31
CHAPTER THREE RESEARCH METHODOLOGY		35
3.1	RESEARCH MODEL.....	35
3.2	INSTRUMENT	35
3.3	QUESTIONNAIRE.....	36
3.3.1	<i>Reliability</i>	36
3.3.2	<i>Tangibles</i>	37
3.3.3	<i>Responsiveness</i>	38
3.3.4	<i>Assurance</i>	39
3.3.5	<i>Empathy</i>	40
3.4	SAMPLING AND DATA COLLECTION	42
3.5	DATA ANALYSIS PROCEDURE	42
3.5.1	<i>Reliability and Validity Test</i>	42
3.5.2	<i>ANOVA and Independent T-test</i>	43
3.5.3	<i>Importance Performance Analysis (IPA)</i>	43
CHAPTER FOUR RESULT AND DISCUSSION		44
4.1	DESCRIPTIVE ANALYSIS	44
4.2	FACTOR ANALYSIS AND RELIABILITY TEST OF IMPORTANCE.....	45
4.2.1	<i>Reliability</i>	45
4.2.2	<i>Tangible</i>	46
4.2.3	<i>Responsiveness</i>	46
4.2.4	<i>Assure</i>	47
4.2.5	<i>Empathy</i>	48
4.3	INDEPENDENT T-TEST OF IMPORTANCE	49
4.4	ANOVA TEST OF IMPORTANCE	50
4.5	FACTOR ANALYSIS AND RELIABILITY TEST OF PERFORMANCE.....	51
4.5.1	<i>Reliability</i>	51
4.5.2	<i>Tangible</i>	52
4.5.3	<i>Responsive</i>	53

4.5.4 <i>Assure</i>	54
4.5.5 <i>Empathy</i>	54
4.6 INDEPENDENT T-TEST OF PERFORMANCE.....	55
4.7 ANOVA TEST OF PERFORMANCE	56
4.8 IMPORTANCE PERFORMANCE ANALYSIS	58
CHAPTER FIVE CONCLUSIONS.....	64
5.1 IMPLICATIONS	65
5.2 SOCIAL IMPLICATION	66
5.3 LIMITATION.....	67
5.4 RECOMMENDATIONS FOR FUTURE RESEARCH.....	67
REFERENCE	68



LIST OF FIGURES

Figure 2. 1 Importance Performance matrix..... 27

Figure 4. 1 The above figure represents the Importance Performance Analysis (IPA) Grid61



LIST OF TABLES

Table 2. 1 Tangible service factors	16
Table 2. 2 Factors that makeup customer satisfaction	17
Table 2. 3 Summary of service quality model	25
Table 2. 4 Defining DINSERV Parameters in Context of a Restaurant	31
Table 2. 5 DINSERV for Chilliesine Indian Restaurant in Tai-Chung City of Taiwan	32
Table 4. 1 Characteristics of Respondents in this Research.....	44
Table 4. 2 Results of factor analysis and reliability test of Reliability	45
Table 4. 3 Results of factor analysis and reliability test on Tangible	46
Table 4. 4 Results of factor analysis and reliability test on Responsiveness.....	47
Table 4. 5 Results of factor analysis and reliability test on Assure	48
Table 4. 6 Results of factor analysis and reliability test on Empathy.....	48
Table 4. 7 The difference in “Factors” on “Gender”	49
Table 4. 8 The difference in “Factors” on “Age”	50
Table 4. 9 The difference in “Factors” on “Education”	51
Table 4. 10 Results of factor analysis and reliability test on Reliability	51
Table 4. 11 Results of factor analysis and reliability test on Tangible	52
Table 4. 12 Results of factor analysis and reliability test on Responsive.....	53
Table 4. 13 Results of factor analysis and reliability test on Assure	54
Table 4. 14 Results of factor analysis and reliability test on Empathy.....	55
Table 4. 15 The difference in “Factors” on “Gender”	55
Table 4. 16 The difference in “Factors” on “Age”	57
Table 4. 17 The difference in “Factors” on “Education”	57
Table 4. 18 Mean ratings of Importance and Performance of selection factors and attribute	58
Table 4. 19 Cronbach's α For Performance Analysis and the Importance of Each Dimension comparison	59
Table 4. 20 Results of Paired t-Test of Importance and Performance for Each Dimension comparison	59

CHAPTER ONE INTRODUCTION

1.1 Research Background and Motivation

Food is one of the basic prerequisites for any living individual since the scope of the food industry has increased exponentially in the past decades.

In the present era, every business wants to expand its horizon and lay its hands in cross-border business. Food chain restaurants nowadays have a plethora of new items to offer to their consumers. Restaurants are coming up with alluring contemporary interiors to persuade consumers to come and dine in apart from their food quality. However, things get more challenging when the food of a different country is being put up in a distinct nation with a completely divergent culture and food-consuming habits. As suggested by (Uma Narayan, 1995), he traced the food culture of India and its religious practices.

This research study is based on a case study, where an Indian restaurant (Indian Cultural Authentic food) was put up in Taichung based on Taiwanese culture. From the history and observation of both the cultures, we see that both are very distinct apart from each other in their food habits and acceptance of various cultural foods.

In context to India's culture and food habits, we heed that maximum Indian traditional food is based on various spices, and the savoury intensity varies as per the taste and region. However, cuisine from north India to south India and from west to east India differs extensively.

Even though Indian cuisine is distinctly territorial, certain common strings can be part of collectively the divergent culinary homes. Indian food throughout the country is profoundly subordinate to curries that are gravy-like sauce or stew-like cuisine with veggies, meat, or butter, notwithstanding that

the zest blends, degree of liquidity, and fixing are decided by territorial inclinations. Indian food in common is additionally exceptionally subordinating to rice, even though southern Indian regions use rice more intensely than other areas as the staple.

The most consumed staple for Indians is the rice of long grains like Basmati rice, wheat, lentils, or pulses. The cuisine in most subcontinent countries is rich in spices, and herbs like ginger, coriander, cardamom, and many others are cooked together to make curries.

The Hindu religion dominates the population of India, and as per the "Guardian report," there are 20% to 40% consume vegetarian meals. And Nonvegetarians mostly consume fish, lamb, pork, and chicken, excluding beef (red meat) since it is considered scarred. But the common ingredients or spices used are chilli peppers, cumin, mustard seeds, fennel, cardamom, cinnamon, turmeric, and garam masala (a mixture of various spices).

Concurring to the 2006 "Hindu-CNN-IBN State" of the Country Overview, 31% of Indians are vegans, whereas another 9% devour eggs. Among the different communities, vegetarianism was most common among the Jain community and after that Brahmans at 55%, and fewer visits among Muslims (3%) and inhabitants of coastal states. Other studies cited by FAO and USDA assess 20%–42% of the Indian populace as being vegan.

India's populace is profoundly different, with social personalities intensely affected by devout and territorial particularities. Ayurvedic lessons, emphasizing the balance between intellect, body, and soul, have impacted Indian food in common, directing fixing pairings and cooking hones. Whereas this reasoning may be a common impact through Indian food, how Ayurvedic nourishment rules are connected contrasts with religion and territorial culture. Around one-third of India's populace is vegan, directed by their Hindu, Jain, or Buddhist religions. This, a noteworthy parcel of India's dishes throughout

the nations is without meat.

Furthermore, devout convictions influence other dietary limitations that shape India's cooking. Hindu adherents go from hamburgers since beef is sacrosanct in this confidence, whereas Muslims accept pork as unclean and never consumed. Depending on the overwhelming devout convictions of a locale, the cooking in a portion.

Now, in the frame of reference to Taiwan, we see that Taiwanese cuisine is dinky and is very well connected to the roots and patterns of historical relocations and colonization. Wikipedia informed the cuisine is greatly influenced by mainland China, prominently from the southern part of China that is Fujian. And had an ascendancy from the Japanese culture due to the colonization of Japanese troops in Taiwan. The cuisine of Taiwanese is distinctly hodgepodge. The nearby inborn flavours and waves of exterior culinary have impacted all coalesced into the "salty-sweet" trademark of cutting-edge Taiwanese cooking in which modest bunches of basil, garlic, and green onion are put in almost every dish. An estimate of 14% of the total population of Taiwan consumes vegetarians compared to its entire population. And the religion is mainly dominated by the followers of Buddhism 35.1%, Taoism 33.0%, Islam 0.3 %, and a few other minor religions. The main consumption of the Taiwanese mob is rice, pork, poultry, seafood, beef, fish, and different kinds of vegetables. Taiwanese Hot Pot, hamburger, Xiao long Bao, tofu, braised pork rice, and oyster vermicelli noodles are common consumption for most individuals.

We see that there is a food culture difference in the eating habits in India, where gravy sauce mixed with meat or vegetables is one of the common foods. In contrast, in Taiwan, we don't see the consumption of gravy or curries in everyday meals. However, it is essential to seek the annotation that the ingredients used to prepare a few meals for both the countries are the same as

the consumption of garlic, ginger, onion, and a few other herbs and spices. The cuisine of vice-versa nations can be prepared as per the taste of the country's people. Currently, the Indian restaurant is put up in the location "Taichung" city and has its branches spread over four different places in the same town. They have been operating their restaurant for the past five years and catering to the people of Taiwan located in Taichung for all groups of people, with their Indian authentic cuisine.

However, with all the above considerations, one of the utmost Importance is Service Quality. Be it in Taiwan or anywhere, the quality of service is one of the essential considerations for the sustainability of the business and dealing in the global market.

In addition, service quality measurement is crucial for evaluating service performance, identifying service issues, controlling service delivery, and deciding on employee and company rewards (DeMoranville and Bienstock, 2003). As a result, assessing quality performance and for service-oriented firms, especially those operating in a competitive environment, looking for improvement methods is crucial in the foreign market.

An increasing population in Taiwan is emphasizing health and privacy (Chen 2008). As a result, both local and international service-oriented enterprises have grown in number. A lot of foreign restaurants have recently opened in Taiwan, particularly in Taipei City. As a result, the question of how to make oneself more appealing and thrive in such a competitive market has become a critical one.

In this regard, we were prompted to complete our research at Taipei City's most famous night market, the 'Shida night market', which is also home to a big cluster of international eateries. In this paper, we try to analyze the Importance performance of the restaurant used as the case study and analyze the preference of the customers related to the service quality

dimensions.

1.2 Research Purpose or Research Gap

The Critical Findings in the paper aim at identifying all the possible things to ensure the best quality services of Chillisine Indian restaurants in Taichung. The evaluation is based upon different factors, which include:

- The parking lot around the restaurant for ease of customers
- Updating the menu as per the demand of the customer
- Offering a better experience to the customers in the form of seating and comfort
- Maintaining complete hygiene
- Fast service
- Training waiters for the problem-solving ability and customer handling
- Better communication at the waiter's end to understand the customer's demands
- Following the 'Customer-First' rule.

All the results of the study can be found in the paper. The implications are based on thorough discussions with the managers of Chillisine Indian Restaurant in Taichung.

1.3 Research Objectives

We will also explore these data with Importance Performance analysis and come up with useful insights so that the stakeholders understand the advantages and disadvantages. Understand the gap and where the stakeholders can concentrate on having a competitive advantage.

We also try to analyze the effect of service quality using the DINESERV dimension; cultural impact leads to customer satisfaction, which in turn affects the satisfaction towards the restaurant and affects sales of the food

items.

The study's main motivation is to acquire proper insights using the IPA method. The paper hypothesizes the framework with the support of the literature review of various previous conducted studies and understands consumer satisfaction with the food choices they have for Indian cuisine. This study can be implemented in a larger way wherein different country can base their restaurants on a specific culture country.

1.4 Research Project and Scope of the Study

The study focuses on assessing and analyzing the DINSERV and gives a brief insight into the competitive advantage and what must be dealt with immediately. We have used past theories to support our research and studied the ongoing market skills to advance the research in every pursuit. The research methodology will use some of these techniques:

1.5 The Structure of the Research

The content of this study is separated into five chapters, which are describing as below:

Chapter one stated the research background, research objective, procedure, and construct.

Chapter two stated the theoretical background, term & definition of each construct, and component used in the study and research hypothesis.

Chapter three showed the research framework, instrument, questionnaire item of each construct, translation procedure, and methodology that will apply to analyze the data.

Chapter four showed the result of data found after running the data and is also using a table of results with an explanation of each finding. Those tables were related to the table of the Factor loading, reliability test, ANOVA and

T-test, and Regression. Moreover, it showed the interrelationship of each hypothesis.

Chapter five would summarise all the results in the context that we want to find out. After that, it also did the discussion and implications for future research.



CHAPTER TWO LITERATURE REVIEW

In this section, all possible types of documents related to the topic of the article have been thoroughly discussed. After an in-depth study of various QoS models and discussing their advantages and disadvantages, various QoS models will be presented in the research field. On this basis, the reasons for choosing the DINESERV model will be discussed, and hypotheses will be proposed.

2.1 The concept of service

Many authors have bent over backwards to define the term "service" up to this point. Given the writers' endeavors, the qualities of Service remain a little unclear. The intangibility of the services is the first origin of this misperception. Furthermore, authors from various educational backgrounds seek to define Service in various ways. Because his prior academic experience had an impact on his cognitive style. Service that you can rely on When describing a service as "anything that cannot be dropped," The Economist Mikhailovich et al. (2017) offered one of the simplest definitions.

Furthermore, according to Kotler et al. (2017)'s service marketing paradigm, is an action or utility that one party can give to the other that is mostly intangible and is not the function of owning something. Other organizations have tried to redefine services by look at their technical and functional implications. There is generally a how and what component to serve. What is delivered is what is provided by the service (for example, meals in a restaurant). The service mechanism is associated with the work of providing the service itself (for example, the process that involves sitting, ordering, bringing food to the table and providing the service, and the care provided by the customer during the meal). Schneider et al. (2004) defined these two characteristics of a system, referring to the first as the dimension of

the company's technical result and the second as the aspect of the service's process or activity. Furthermore, the other defining characteristics of the service come entirely from its purity. For pure services, there will be no related products or things that the people involved can see and feel. Schneider et al. Divided the service features into three parts in 2004 because they are pure.

They are as follows:

Intangibility determines that pure services have no physical manifestations. Therefore, it cannot be seen, touched, held, or stored.

Relative inseparability means that pure services are relatively inseparable, which means that pure services are composed entirely of delivery experience, cannot be produced at one time and place, and then stored for later use.

Relative heterogeneity: Requirement Services are relatively more heterogeneous than commodities in terms of production and delivery and differ from physical commodities in several aspects.

Combined with the above definition, it is not difficult to understand that the concept of Service is broad and difficult to understand. However, the word "service" itself can be said to be ambiguous. If there are no other concepts such as service and quality, it will lead to greater ambiguity. Service and quality are likely to occur at the same time. In other words, this means that they are indivisible. Therefore, in the next section, the term quality concept will be interpreted

Concept of Quality: Customers enjoy and delight products or services, as per Chakrapani et al., who remarked in 1998. They paid the premium since their satisfaction with the goods or service exceeds their perceived value for money. It also represents the competitive market's quality by stating that the greatest quality product or service is the one that delivers the most enjoyment.

Schneider et al. (2004), On the other hand, three different methods were proposed to address the definition of quality. They are Philosophical method: in this method, people know quality when they see quality but cannot define quality. Technical method: this method of defining quality is in stark contrast to the first method, which considers quality from an objective and absolute perspective.

The amount of deviations from these norms, or the number of faults, is commonly used to objectively quantify quality. The user-based technique is a way in which the user determines the product or service's quality. It is founded on the belief that quality is subjective and is influenced by individual customers' perceptions. According to the above definition of quality, a service or product adds value, and quality represents that value. The customer perceives a higher-quality product or service when its value is higher, and vice versa.

Therefore, this may inspire more enthusiasm among customers and give the company a competitive advantage over its peers. Finally, if the company is focused, professional and striving to achieve & provide "quality" in all products/services it provides to customers. In the next section, the concept of quality of service will be defined.

2.2 Quality of service

Quality of service has always been considered one of the most important factors for any company or service industry. Since service quality largely determines customer satisfaction, various studies have defined multiple virtues of service quality. The quality of service is one of the most important factors in this highly competitive market.

Most companies use Vienne to gain an advantage over their competitors. The better the quality of the service, the greater the chances of success in the

market and vice versa. Today, the quality of service has become the focus of attention of global companies. This is because the world economy has shifted towards a service-oriented economy. In addition, customers began to pay more attention to the quality of services provided to them. Therefore, G Senay et al. (2019) define service quality as a concept of customer service in business management. It is defined as "the result of an evaluation process in which consumers compare people's expectations with the services they receive

"However, due to the intangible nature of services, defining the quality of services is a headache for many researchers. Different from "product quality that meets requirements", service is a relatively vague concept, and it is even difficult to define its definition.

Service quality is also the challenge experience of customers when evaluating themselves. Their request is not. "It is easy for consumers to make it clear. On the contrary, customers form their expectations of service quality even before the experience. Then, before the service is encountered, the customer uses various internal and external cues that indicate possible performance standards to generate expectations for the next experience (Wilkins et al. 2007). In other words, this means that customers may use your previous experience. Anticipate your future participation.

For example, suppose a customer visits MacDonald's restaurant and has a bad or good experience with your service. When the customer considers going to another competitive restaurant (such as Burger King), they are likely to form an expectation of the service provided based on their previous experience at MacDonald's. In addition, the quality of services must be measured to lead any business towards sustainable success. Because unless the quality of delivery is controlled, it is difficult to determine the company's position in today's highly competitive market. As cited by economists

Chakrapani et al. (1998), the measurement of quality plans should be based on customer expectations, not on quarterly earnings. In addition, it is undeniable that the interaction between the customer and the service provider determines the quality of service, and the service provider tries to influence the customer's impression and the image of the operator. Furthermore, research has shifted its focus to customer service and how to improve the quality of external service connections between contact persons (such as waiters and customers) (Stanley and Wisner, 2002).

2.3 Service quality and satisfaction Customer

Customer Satisfaction and the degree of satisfaction is one of the key and important roles of any organization. It can be used as a tool to stimulate customer enthusiasm for the company's services or products. It can measure customer expectations and lead to the creation of happiness. Customer satisfaction is a basic and comprehensive concept that has received more attention from many authors.

According to Hill and Alexander (2006), customer satisfaction is a measure of how the total products of your organization relate to a set of customer requirements. Another author defines customer satisfaction because it is the customer's complaint responsibility, which is a judgment on the degree of consumer-related pleasure provided by the product or service function or the service product itself, including insufficient compliance. or excessive (Liang and Zhang, 2012). Many scholars have investigated satisfaction from different aspects Zeithamal and Bitner (2003) showed in their research that a certain kind of happiness is related to satisfaction and extends to customers' cautious attitude towards services or products. (Churchill and Suprenant, 1982) also studied a non-confirmation model in which they checked customer expectations and perceived performance

ratings.

It revolves around the four aspects of performance, expectations, denial, and satisfaction. The author Johnson et al. (1995) define satisfaction as the experience gained when using the acquired service. Companies pay close attention to profit margins. The customer satisfaction of any organization can help the company achieve its goals. The literature by Luo 2007 and Psodorov (2011) shows that the legal use of high-quality services can achieve customer satisfaction and generate more profits for the organization.

The literature by Oliver et al. (1980), defined satisfaction as the divergence between expectations and perceptions of the service. It can be before or after the service collection. Parasuraman et al. (1988) believe that service quality and satisfaction are two different impressions, but there is a big difference between them.

The author Duc Nha Le, (2020) shows that some infrastructure innovations and financing indirectly affect worker satisfaction in Vietnamese ports. According to previous literature by Lee and Yoo, (2000), many confirmations that service quality is the forerunner of customer satisfaction. Global customer satisfaction is based on a general assessment of the total purchase and consumption experience of goods or services over a period (Fornell et al. 1992). Since satisfaction with a particular transaction can provide specific diagnostic information about a particular product or service, cumulative satisfaction is a more basic indicator of a company's past, current, and future performance.

Therefore, the company must focus on formulating effective strategies to obtain satisfied customers. A business with many satisfied customers can benefit in many ways. Satisfied customers are more likely to buy back or buy, which increases the company's profits (Gupta et al. 2007) and they become regular buyers of products or services and provide positive feedback about

their experience to family or friends (Ivkov et al. 2014). Additionally, high customer satisfaction should indicate greater loyalty to existing customers, lower price elasticity, isolation of existing customers from competitive efforts, and reduced costs.

2.4 Factors Affecting Customer Satisfaction

Many elements will influence customer pleasure. According to Stevens et al. (1995), 91 percent of unsatisfied restaurant customers will never return and will typically tell 8 to 10 people about their bad experiences.

Furthermore, Hill and Alexander (2006) stated that the overall gap that results in consumer discontent is the difference between expectations and experience. And Parasuraman et al (1988) mentioned that the term "expectation" used in the service quality literature is different from the way used in the consumer satisfaction literature. Specifically, in the satisfaction literature, expectations are viewed as a consumer's prediction of what may happen during an upcoming transaction or exchange. In contrast, in the literature on quality of service, expectations are the wants or needs of consumers, that is, what they believe service providers should provide rather than provide (Parasuraman et al. 1988).

In other words, if the gap between customer expectations and experience does not fulfil customers' expectations, customer satisfaction will be affected positively or negatively, according to the statement above. In addition, Neu et al. (2010) attempted to investigate the relationship between service quality, public perceptions of service quality, customer satisfaction, and buyback intentions in the Malaysian fast-food business.

Therefore, responsiveness and empathy highlight the gap between consumer expectations and their experience at McDonald's, KFC, and Pizza Hut in Malaysia. Therefore, according to their research, when it comes to the

Customer satisfaction in Malaysia's fast-food business is affected by responsiveness and empathy. Leonard et al. (2016) conducted another study to assess customers' views of the quality of tangible services in the catering business. They discovered that the beauty of the table (that is, the comfort of the diners and its impact on the restaurant's quality) and the purity of the hygiene (that is, the cleanliness of the restaurant and the standards for the diners) have an impact.

It has a significant impact on diners' satisfaction. Word of mouth revisited and intentions. Tangible service quality is a potential factor that affects customer satisfaction and related behaviours. Rongda and JunShu (2012) tried to study the relationship between restaurant interaction orientation, customer satisfaction and behavioural intention. The interaction orientation in this study represents the ability of restaurants to interact with individual diners and obtain information from them to maintain profitability and long-term relationships (RongDa et al. 1994).

In the process, they were able to divide the restaurant's customers into two types of new customers (FT) and frequent customers (FC), which helped them see the precise impact of interaction orientation on customer satisfaction and behavioural intentions. However, their results meant that interaction orientation significantly affected both groups of clients. Another important finding from this research is that customer perceptions of interaction orientation influence behavioural intentions through satisfaction. Additionally, technology is believed to have a considerable impact on customer satisfaction. Although Di Julius et al. (2003), technology can simplify things, deliver products and services faster, and make us more efficient, it will never give us a warm, vague sense of honesty, trust, and courtesy.

Customer satisfaction and quality of service Many scholars try to

examine the relationship between customer satisfaction and quality of service. Mhlanga et al. (2018) pointed out that the quality of the restaurant's service is affected by several attributes of the restaurant, such as the physical environment, the service of the staff, the atmosphere, the location, and the type of menu and the price. The proper combination of these important attributes should lead to the perception of quality of the customers, which in turn will increase their satisfaction and loyalty. According to this statement, service quality is also related to customer loyalty.

Another author named Leonard et al. (2016) tried to examine the impact of service quality on customer behaviour by selecting tangible aspects of service quality. They tried to explore the causal relationship between tangible service quality and diners' satisfaction. Based on your results, three tangible service factors are believed to have a positive impact on diners' satisfaction.

Table 2. 1 Tangible service factors

	Service factors	Descriptions
1	Table aesthetics	The convenience of the chairs and tables, utensil setting, and decor/arrangement on the table, an easily readable menu with a variety of choices on the list, and descriptive menu verbiage
2	Hygiene purity	Includes the hygiene of the dining table, the bathrooms, and the overall hygiene of the restaurant.
3	Vehicle convenience	This includes easy access to the parking lot and the provision of valet parking.

Suresh Chandra et al. (2002) did another study to investigate the distinctiveness of customer happiness and service quality, as well as their relationship. They take a different strategy and see consumer pleasure as a

multifaceted construct. Still, the fundamental factors/items that determine customer pleasure are the same ones that determine service excellence (i.e., SERVQUAL).

In other words, their work suggests that customer happiness should be operationalized along the same dimension as service quality and using the same things that span the many dimensions. As a result, the following five factors were thought to contribute to customer satisfaction.

Table 2. 2 Factors that makeup customer satisfaction

	Customer satisfaction	Description
1	Core service or service product	Implies the inseparability of service
2	Human element of service delivery	Humans are involved in service delivery
3	Systematization of service delivery	Which is the non-human element
4	Tangibles of service	Servicescape/the physical environment
5	Social responsibility	Ethics involved in delivery of service

In general, the study result reveals that service quality and customer satisfaction do exhibit independence and are indeed different constructs from the customer's point of view. They also found that these two constructs are closely related with respect to the five factors.

2.5 Service quality model

Service quality has won the great attention of many authors, business owners and customers. Various scholars have tried to put forward many models to measure service quality and observe their impact on different structures such as customer satisfaction, loyalty, word-of-mouth, and product quality. In the next section, I will introduce some models and their advantages and disadvantages.

2.6 SERVICESCAPE

Drew inspiration from the research of Bakers (1987). Bitner (1992) developed SERVICESCAPE by grouping all the internal physical attributes of the organization. Divides them into three dimensions: environment, space design/function and signs/symbols/artifacts. Although these three dimensions are very similar to the three categories of Baker et al. (1987), SERVICESCAPE is defined as the physical environment created by humans, not the natural environment.

Therefore, Bitner et al (1992) research is literally translated into the physical attributes of the organization, rather than Baker's (1987) broader view of physical service quality (Bitner, 1992; Rajpoot, 2002; Ryu and Jang, 2008, cited in L. LEE, et al. 2016).

Although Bitner's (1992) SERVICESCAPE's classification of physical attributes is supported by many empirical and theoretical findings, its inherent limitations are in two aspects: (1) it is only related to the internal organization, (2) its application also has Universality has its own restrictions on specific industries L. LEE, et al. (2016).

2.7 Five-aspect meal model (FAMM)

As mentioned in Gustafsson et al. (2006), the starting point to describe this model is the visits to restaurants. It starts from the entrance to the restaurant, which is the first aspect to be defined.

The second aspect is the meeting, which not only refers to the meeting between the waiter and the customer, but also the interaction between the customers and the communication between the service personnel.

The third aspect is the products, which here refers to food and beverages and their preparation.

The fourth aspect is the management control system, which refers to the

economic, legal, and logistical aspects of providing complete meals. However, this model has a deficiency that cannot be corrected in the short term. Sometimes it is not possible to prepare meals according to the intentions of the model.

At least in the short term, the room may not be able to change depending on the theme of the restaurant. Employees may need more education to maintain the required quality of service and it seems difficult to change this in the short term. The prices of dishes or menus that guests are willing to pay may not meet FAMM quality standards (Gustafsson et al. 2006).

2.8 SERVQUAL

Another well-known service quality model is SERVQUAL, which was developed by (Parasuraman et al. 1988). They define service quality as the difference between consumers' perceptions of the services provided by a particular company and their expectations of the company that provides such services. In their research, they were able to identify five gaps that may affect the concept of service quality and the factors that affect it. These gaps are Parasuraman et al. (1995):

2.8.1 Consumer expectation management perception gap

It is the difference between executive perception and consumer expectation. In essence, service business executives may not always know in advance which functions mean high quality to consumers, which functions must be provided by the service to meet consumer needs, and which functions are required at the level of performance to provide high quality Service.

2.8.2 Management perception of the gap in service quality specifications

In addition to resource and market constraints, another reason for the gap between expectations and the actual specification set established for services is that management lacks sufficient commitment to service quality, service

quality specifications, and service delivery gaps.

Performance guidelines. With good service and correct treatment of consumers, the performance of high-quality services may be uncertain. An executive surveyed described the original service quality problem as "one person, one repairman, it is difficult to maintain standardized quality."

2.8.3 Service delivery External communication gap

Advertising in the media and other company communications can affect consumer expectations. If it is expected to play an important role in consumers' perceptions of service quality (as the literature on services insists), the company must ensure that its commitment in communication does not exceed the scope of what it provides.

2.8.4 Perceived service gap with expected service

The key to ensuring excellent service quality is to meet or exceed consumer expectations for service. This research will focus on this gap to determine the customer's perception of service quality. Since gap 5 is the result of other gaps (Wolniak and Skotnicka Zasadzien, 2012), the measurement of this area will bring the overall result. However, this does not mean that other gaps are not necessary. In addition, his work briefly describes the development of 22 tools (called SERVQUAL) to assess customer perceptions of service quality in retail and service organizations.

They identified 10 possible overlapping dimensions of service quality (i.e., tangibility, reliability, responsiveness, communication, credibility, security, skill, courtesy, understanding/knowledge of customers and visitors), and this process resulted in 97 items. Therefore, they performed a purification at scale through a set of iterative sequences. They can identify 34 elements in seven dimensions. Finally, they executed the second purification stage and finally obtained 22 projects in five dimensions.

These dimensions are:

Reliability: the ability to deliver the promised services accurately and reliably, to ensure the knowledge and courtesy of employees, and their ability to convey confidence and security. Respond to the willingness to help customers and provide timely services. Physical facilities, equipment, and staff empathy. Care, and personalized attention as suggested by Nancy and Christina, (2011), in terms of measuring service quality, projects of different sizes may be more relevant than others, depending on the specific industry.

2.9 LODGESERV

LODGESERV was developed by Knutson, et.al. (1990) and has achieved success in the hospitality field of the hotel industry. It is based on the five dimensions of service quality determined in SERVQUAL. Unlike SERVQUAL, this model has 26 specific accommodation elements.

By comparing customer perceptions of service quality with consumer expectations, hotel companies will be able to determine whether it exceeds, meets, or falls below expectations, and LODGESERV will allow managers to make these comparisons for each of the five dimensions of service: holistic perspective (Knutson et al. (1990). They also proposed some valuable applications, such as dividing consumers into groups based on their expected scores (e.g., high, medium, and low), group units/region sons / regions based on customer perceptions, and reporting to company hotels/shows hotels how it compares to him. Competition in service quality Knutson et al. (1990).

In their research, they tried to examine consumers' expectations for the economy, mid-range, and luxury hotels, and found that all five dimensions rank the same in all three market segments, and the higher the price category, the higher the price. Higher. Service quality and below. LODGESERV has been translated into other languages and tested by Stevens et al. (1995). Later, they discovered that this instrument is equally effective in different cultures.

In the process, these authors conceptualized DINESERV to find an industry-specific tool to measure service quality.

2.10 DINESERV

They were capable of writing DINESERV Stevens et al. by applying the SERVQUAL tool to the catering business and use the lessons acquired in the growth and enhancement of LODGESERV (1995). DINESERV, like SERVQUAL, is a gap theoretical model because it combines the quality-of-service anticipation index with service quality perception index using the same 29 parts, and it is an achievement measuring standard used to measure the service's results. perception formed by (Nancy & Christina, 2011), The instrument had 40 sentences prior to any purification.

They then performed confirmatory factor analysis to narrow the list down to 29 elements. DINESERV was changed at this time to determine the restaurant's service quality. As a result, they termed this version "DINESERV.PER," which is intended to evaluate consumers' views of restaurant quality on a continual basis. The 29 survey methods comprise 10 for tangible things, 5 for dependability, 3 for responsiveness, 5 for safety, and 5 for empathy (specifically DINESERV).

DINESERV.PER's question item aristamere is an appealing parking space and building exterior.

1. Has a visually appealing eating area.
2. They are well-dressed, clean, and well-groomed employees.
3. The price range corresponds to the restaurant's picture.
4. It has a clear menu.
5. The menu is pleasing to the eye and compliments the restaurant's image.
6. It has a pleasant and easy-to-move-around dining space.
7. Has immaculate restrooms.

8. Have the dining spaces in the dining room been thoroughly cleaned?
room.

1. Serves you in the time promised.

2. Quickly corrects anything that is wrong.

3. Isle and consistent.

4. Provides an accurate guest check.

5. Serves your food exactly as you ordered it.

6. During busy times, employees shift to each other to maintain speed and

Quality of Service.

7. Provides prompt and quick Service.

8. Gives extra effort to handle your special requests.

9. Has employees who can answer your questions completely.

10. Makes you feel comfortable and confident in your dealings with them.

11. Has personnel who are both able and willing to give your information
about menu items, their ingredients, and methods of preparation.

12. Makes you feel personally safe.

13. Has personnel who seem well trained, competent, and experienced.

14. Seems to give employees support so that they can do their jobs well.

15. Has employees who are sensitive to your individual needs and wants,
rather than always relying on policies and procedures.

16. Makes you feel special.

17. Anticipates your individual needs and wants.

18. Has employees who are sympathetic and reassuring if something is
wrong.

19. Seems to have the customers' best interests at heart.

DINESERV.PER item number and corresponding DINSERV size: 1-10,
tangible; 11-15, reliability; 16-18, responsiveness; 19-24, warranty; and
25-29, empathy (Stevens et al. 1995).

DINESERV is suggested by Stevens et al. (1990,) as a reliable and very simple instrument for determining how consumers perceive restaurant quality. Service quality requirements are organized into five categories in the 29 DINESERV questionnaires: safety, empathy, reliability, responsiveness, and tangibility. Problems and the ability to solve them They also said that the technology gives restaurant managers a quantitative gauge of customer expectations, which are important since unmet aspirations will drive customers away.

However, DINESERV, like all of the previous service quality models, has been questioned by some authors (Jinsoo and amp; Jinlin, 2010). "Although DINESERV incorporates several elements to measure air quality, it loses the factor of food quality," for example, which is one of the most essential criteria to evaluate a restaurant's total customer experience. Furthermore, Stevens et al. (1995) proposed that DINESERV be used on a regular basis. DINESEP.PER is given out every two to three months to 50 to 100 of the closest clients who are chosen at random over the phone. Calculate and compare the average and total score for each dimension (the average of the five averages) to the previous score.

Therefore, DINESERV.PER users can determine whether the change in concept is a change in normative expectations (that is, expectations of what should happen) or the result of changes in the quality of services provided. However, for today's "NoCall list", the recommended procedure may be difficult to implement (Nancy and Christina, 2011).

Table 2. 3 Summary of service quality model

	Advantage	Disadvantage
SERVICSCAPE	Is the most precise equipment for determining physical characteristics.	Focus solely on the concrete aspects of service.
FAMM	Increases the emphasis on the restaurant's ambiance.	In the medium term, it will be difficult to correct its shortcomings.
SERVQUAL	Is used in a variety of industries	Some helpful parts were left out, which could be beneficial to other sectors.
LODGESERV	It is unique to the industry.	The hotel business is the only one that qualifies.
DINESERV	It is unique to the industry.	Requires periodic evaluation (every two or three months).

2.11 The conceptual framework

The interests of winning bidders have become the focus of global enterprises. Especially Satisfying them is now the daily work of managers. However, satisfying them is not an easy task for many reasons. Their behaviour will be affected by factors such as product quality, price, and service quality.

In addition, as I mentioned before, customer satisfaction can be determined by many factors, such as technology, interaction orientation, and tangible aspects of the service. The gap between customer expectations and perceptions also determines customer satisfaction. In addition, understanding the reasons for their satisfaction is a relief to managers and business owners. Therefore, I try to check whether the quality-of-service dimension has a significant impact on customer satisfaction.

This study will take Chilliesine Indian Restaurant in Taiwan, as an example to investigate customer perceptions and expectations of service quality in the restaurant industry. When considering measuring the gap between customer expectations and service quality perceptions, the first

service quality model I thought of was the "SERVQUAL" model.

However, the model ignores some attributes that can be applied to restaurants when measuring service quality. Therefore, we searched the literature for another suitable model, which can answer research questions and help us achieve our research goals. Therefore, we found that the "DINESERV" model is suitable for my research. As mentioned in the literature review, it is an adaptation of the SERVQUAL tool for the catering industry, with 29 items measuring five dimensions of service quality. Like SERVQUAL, DINESERV is a gap theoretical model because it uses the same 29 items to compare the service quality expectation index with the service quality perception index (Nancy and Christina, 2011). The reason we chose this model is that it adds some industry-specific (i.e., restaurant-specific) attributes. In our increasingly globalized world, the external efficacy of marketing concepts (such as DINESERV) has taken center stage.

In other words, can concepts and theories explain the same phenomenon in different countries (Ursula Sigrid and Meng Keang, 2010)? Based on this, the author conducted a study to verify its applicability and recommend future studies in other countries/regions. Based on the suggestion, I chose the DINESERV tool to measure the customer's perception of the quality of the service and verify its applicability in my study based in Taiwan.

The dimensions of the DINESERV tool that I used in this study are:

Reliability: the ability to perform the promised service reliably and accurately,

Assurance: to ensure knowledge, courtesy of the staff and the ability to convey confidence and security,

Responsiveness: willingness to help clients and provide timely service,

Tangibles: the appearance of facilities, equipment, and staff,

Empathy: empathetic care and personalized attention.

2.12 Importance of Performance Analysis

Importance performance analysis (IPA) is a market tool, an analysis to measure individual have their thoughts towards a particular service Martilla and James (1977) were the primary key individual to present IPA, basing their application on the conceptual establishment of multi-dimensional choice models (Wilkie and Pessemier,1973).

They perceived the esteem of examining both the traits of importance and figure exhibitions, outlying their case through a straightforward consideration of a car benefit merchant to expand benefit clients and rehash deals on unused vehicles.

Figure 2. 1 Importance Performance matrix



Some scholars have used this method to find real business solutions and use this technique to examine various attributes and facilities (Hammitt, Bixler and Noe, 1996). Through previous studies by Levenburg and Magal, (2004) and Beale and Fortuna, (2008), it is suggested that the IPA matrix can provide a vivid picture regarding customer satisfaction with service quality.

IPA has been widely used as a marketing tool, but recently, due to its uses, it extends its application to various other fields like food service, as suggested

by (Tontini and Silveira 2007). Research by Jui-Kuei Che et al., (2010) investigated the preference gap about the improvement of the service quality in restaurants in Taiwan.

IPA took a huge wide of applications in the field of banking Albright and Tinson (2005), where they are to understand the customer's perspective and how to improve the service they are currently providing. It has also helped industries like healthcare, e-business, and tourism. IPA provides insight into a service's weaknesses and strengths, and the following information gives a keynote to the managers to have a decision regarding them service improvement.

The IPA tool is contemplated as an expectation-disarrangement analysis that revolves around customer satisfaction as an action of Importance and Performance of different services offered by an organization (Martilla and James 1977). Research conducted by Franz and Townson, (2008); Perters and Franz (2012) suggested that IPA has been a robust methodology to provide traditional needs and can be used by most managerial professionals to decide.

IPA is a practical and purposeful method by which managers can quickly and efficiently gain insight into the big picture, whether they are on the right track or if certain corrective actions are needed. As suggested by Semso Ormanovic, and Alen, (2011), traditional IPA is based on erroneous underlying assumptions, and therefore, the results obtained by this method are called into question.

Customer satisfaction data obtained by direct method carry with them the respondents' conscious preference and an indirect way of assessing the dimensions of Importance and Performance. IPA can help quality strategy creators identify those elements of service and products whose resource allocation can contribute to more satisfied users. IPA has also been applied to measure e-government services in Japan (Meng Seng Wong, Nishimoto

Hideki 2010).

IPA research conducted by Wade and Eagles (2003) showcased the main spotlight on the visitors' service and accommodation. Performance (consumer satisfaction) can be viewed as a big or small strength or weakness at each level. The dimensions labelled "Keep up the good work" indicate those opportunities for preserving a competitive edge and are thus important strengths.

Due to increased rivalry among foreign restaurants in Taiwan, how to meet the needs of Taiwanese customers has become increasingly important in deciding the success or failure of restaurants that are also competing against domestic businesses. As a result, IPA was used to determine how important IPA is to service goods and assess customer satisfaction with existing foreign restaurants to Taiwanese buyers.

2.13 Defined Dimensions of DINESERV, Attributes of Service Quality

In much literature related to service quality, the SERVQUAL method developed by Parasuraman et al., (1988) showed that five dimensions were very important: Reliability, Tangibles, Responsiveness, Assurance, and Empathy. Scholars Miklos Pakurar and Judit Olah (2019) used the same dimension along with an extension of financial aspects, Employee competencies, access to services understanding of the service quality, and reflecting customer satisfaction.

2.14 Reliability

Parasuraman et al., (1988) suggested that Reliability is one of the crucial factors in service quality in most service industries. Here in context, Reliability refers to the capability to offer quality service which is precise and dependable. The concept revolves around the adequate service provided by the enterprise to the customers in a well-mannered fashion. About restaurants, Reliability adapts to reservations of a table, and invoice accuracy.

2.15 Responsiveness

Responsiveness generally refers to eagerness to acknowledge and resolve customers' disputes with their prompt services. Service quality can be enhanced with the help of the Responsiveness of the staff members and their eagerness to solve the disputes as quickly as possible. Zeithamal (2003) suggested that benefactors are timely helped with the drinks list and cuisine and react suitably to customers' requests for incite service.

2.16 Assurance

Assurance shows the capacity to inject certainty and belief within the customer. In this context, the staff members try to gain the confidence and trust of the customers.

2.17 Empathy

It is the capacity to empathize and try to fathom the customers. The customers are kept as the highest priority, and the restaurants must try to assist the customers in all the possible means. It is one of the essential aspects that might define the progress or the downfall of the restaurant. Every restaurant must consider it for successful and growing operations.

2.18 Tangibles

It is the staff's physical outlook, the physical environment, and anything that can be observed and touched. It mainly provides a soothing effect to the customers. If we consider defining all the five dimensions of DINERSERV based on the restaurant industry, here is the list to give a specific idea.

Table 2. 4 Defining DINSERV Parameters in the Context of a Restaurant

No.	Dimension	Description
1.	Reliability	Completing all the restaurant services with accuracy to deliver satisfaction to the consumers
2.	Responsiveness	Taking progressive improvement steps to meet customer expectations
3.	Empathy	Personal care and attention to every visitor of your restaurant
4.	Assurance	Knowledge and confidence of restaurant management to build trust
5.	Tangibles	From your interior, dining essentials, food, and everything that can be touched or felt

2.19 Case Study: Chilliesine Indian Restaurant

The subject for the research is Chilliesine Indian Restaurant, which is in Taiwan. They are predominantly situated in Taichung and Hsinchu, holding four branches and one branch respectively in those cities. They started their food industry business in 2015, and it's been five years, having five units.

The restaurant offers authentic Indian cuisines from the northern and southern parts of India. They try their best to attain the taste, aroma, and flavor of each dish with the efforts of the Indian Chefs hired in the restaurant. They also cater to small- and large-scale events in the restaurant. The famous Michelin Guides have also been listed as the best restaurants to dine in Taichung. The restaurant has made its name to the Michelin Guide's, where they mentioned how good they have been doing since 2015 and serving various foods and offering vegan options and popular non-spicy food for children.

DINESERV MODEL QUESTION ITEMS

Please rank your expectations and perceptions of Chilliesine Indian Restaurant, Taiwan's service based on your previous experience as a customer. Here is a list of comments that you can evaluate on a scale of 1 to 5, and then mark the number that perfectly represents how you feel.

Table 2. 5 DINSERV for Chilliesine Indian Restaurant in Tai-Chung City of Taiwan

DINESERV statements		What is your expectation of Chilliesine service? (Your expectations)					How do you found/feel with Chilliesine? Provisioning (Your perception)				
		SD	D	N	A	SA	SD	D	N	A	SA
TANGIBILITY (TA)											
TA1	Chilliesine has visually attractive parking areas and building exteriors	1	2	3	4	5	1	2	3	4	5
TA2	Chilliesine has a visually attractive dining area	1	2	3	4	5	1	2	3	4	5
TA3	Chilliesine has staff members who are clean, neat, and appropriately dressed	1	2	3	4	5	1	2	3	4	5
TA4	Chilliesine has clean crockeries Before dining	1	2	3	4	5	1	2	3	4	5
TA5	Chilliesine has a menu that is easily readable	1	2	3	4	5	1	2	3	4	5
TA6	Chilliesine has a visually attractive menu that reflects the restaurant's image	1	2	3	4	5	1	2	3	4	5
TA7	Chilliesine has a dining area that is comfortable and spacious	1	2	3	4	5	1	2	3	4	5
TA8	Chilliesine has rest rooms that are thoroughly clean	1	2	3	4	5	1	2	3	4	5
TA9	Chilliesine has dining areas that are thoroughly clean	1	2	3	4	5	1	2	3	4	5

ASSURANCE (AS)		SD	D	N	A	SA	SD	D	N	A	SA
AS1	Chilliesine serves you in the time promised	1	2	3	4	5	1	2	3	4	5
AS2	Chillesine quickly corrects anything that is wrong	1	2	3	4	5	1	2	3	4	5
AS3	Chilliesine is dependable and consistent	1	2	3	4	5	1	2	3	4	5
AS4	Chilliesine provides an accurate guest check	1	2	3	4	5	1	2	3	4	5
AS5	Chilliesine serves your food exactly as you ordered it	1	2	3	4	5	1	2	3	4	5
RESPONSIVENESS (RN)		SD	D	N	A	SA	SD	D	N	A	SA
RN1	Chilliesine during busy times, has employees shift to help each other maintain speed and quality of service	1	2	3	4	5	1	2	3	4	5
RN2	Chilliesine provides prompt and quick service	1	2	3	4	5	1	2	3	4	5
RN3	Chilliesine gives extra effort to handle your special requests	1	2	3	4	5	1	2	3	4	5
RN4	Chilliesine waiters are calm in dealing with customers even in the busiest hours	1	2	3	4	5	1	2	3	4	5
RELIABILITY (RL)		SD	D	N	A	SA	SD	D	N	A	SA
RL1	Chilliesine has employees who can answer your questions completely	1	2	3	4	5	1	2	3	4	5
RL2	Chilliesine makes you feel comfortable and confident in your dealings with them	1	2	3	4	5	1	2	3	4	5
RL3	Chilliesine has personnel who are both able and willing to give you information about menu items, their ingredients, and methods of preparation	1	2	3	4	5	1	2	3	4	5
RL4	Chilliesine makes you feel personally safe	1	2	3	4	5	1	2	3	4	5
RL5	Chilliesine has personnel who seem well trained, competent, and	1	2	3	4	5	1	2	3	4	5

	experienced.										
RL6	Chilliesine serves food exact food as ordered	1	2	3	4	5	1	2	3	4	5
EMPATHY (EM)		SD	D	N	A	SA	SD	D	N	A	SA
EM1	Chilliesine has employees who are sensitive to your individual needs and wants, rather than always relying on policies and procedures	1	2	3	4	5	1	2	3	4	5
EM2	Chilliesine makes you feel special	1	2	3	4	5	1	2	3	4	5
EM3	Chilliesine anticipates your individual needs and wants	1	2	3	4	5	1	2	3	4	5
EM4	Chilliesine has employees who are sympathetic and reassuring if something is wrong	1	2	3	4	5	1	2	3	4	5
EM5	Chilliesineseemstohave the customers' best interests at heart	1	2	3	4	5	1	2	3	4	5

CHAPTER THREE RESEARCH METHODOLOGY

Based on the literature reviews, in this chapter, the consideration will illustrate the hypothesis of the framework; in extension, this chapter will use the methods to measure and analyze the framework developed based on the previous studies.

3.1 Research Model

As per the literature review described in chapter two and IPA matrix development, the proclamation of the thesis would be described as the below framework.

3.2 Instrument

This survey would target the locals and ex-pats living in Taichung city located in Taiwan, mainly individuals visiting Indian restaurants in that location. The questionnaire is branched into two parts, the construct questions, and the demographic.

The construct will involve four from Reliability, eight from Tangibility, four from Responsiveness, four from Assurance, four from empathy, and 24 questions for the DINESERV construct, which is the adaptation of SERVQUAL, the measure of service quality. In addition to this, there are four more questions of satisfaction. Thus, the total number of questions is 28 to test the complete framework.

The demographic part will include age, gender, occupation, education level, and locations – locals or ex-pats in Taiwan. In this study, it uses the five-point scale with "1" denotes as "strongly disagree," "2" indicates as "disagree," "3" denotes as "neutral," "4" denotes as "agree," and "5" means as "strongly agree." Thus, the scale will appear in the questionnaire survey by letting the respondent rate their perception of the items, divided into

Importance preference and Performance.

3.3 Questionnaire

In this study, there are three dimensions, and the first dimension has five subdimensions. Each size has its questionnaire items that are referred from previous studies and research.

3.3.1 Reliability

The term "reliability" refers to an organization's ability to do a task correctly the first time. It also demonstrates that the company is working hard to keep its commitments and is focused on results. The SERVQUAL service quality model lists reliability as the first dimension. According to Parasuraman et al. (1998), reliability is the most important aspect of the service quality model. It is the ability to provide the promised services in a consistent and correct manner.

The word "reliability" relates to a company's ability to keep its promises in terms of delivery, service provision, troubleshooting, and pricing. Customers like to do business with companies that follow through on their promises, especially in terms of service delivered and basic service qualities. Customers' expectations of reliability must be understood by all businesses. Customers are most directly affected by businesses that do not supply the core services that customers believe they are buying. The SERVQUAL model confirms the ability to provide services in an accurate, timely, and credible manner throughout its reliability dimension.

Delivering items or service to consumers on time and without faults relies heavily on consistency. One must keep one's word and deliver services on time and properly as promised. Every day, for example, the company sends emails to clients on time. Researchers disagree on how guarantees should be classified under the service quality dimension, such as the marketing

department. As a result, employees understand the need of establishing customer trust in order to achieve a competitive edge and maintain client loyalty.

The questionnaires are inferred from the past studies conducted by the scholar to reveal the Reliability of a subdimension of DINESERV, service quality (Jui-Kuei Chen, I Shuo Chen,2010 Juliana Rocha, Antonio Carlos, 2014).

1. The mistakes are corrected as soon as they occur.
2. Service is reliable.
3. The bill or invoice is accurate
4. Inform customers of the menu decently.

3.3.2 Tangibles

Parasuraman et al. [1988] are a group of researchers who came up with a novel approach to problem - solving. Identify physical assets as tangible assets (equipment, personnel, and communication materials). The physical representation of the service that the customer uses to assess its quality. Physical facilities, instruments and machines needed to provide services, and representation of services, such as statements, cards (debit and credit cards), speed of operation, and efficiency, all are instances of tangible assets.

1. Some benefits are tangible, such as appearance, bank counters, overdraft facilities, business hours, and transaction speed and efficiency. As per Parasuraman et al. (1988), tangible assets were as vital as empathy. Business hours should be included in the empathy dimension, according to the author, and overdraft privileges should be included in reliability dimension. Treating tangible assets as distinguishing features. The surveys were adapted from a study published in Pete Stevens and Bonnie Knutson's book *Cornel Hotel and Restaurant Administration Quarterly*, and were based on inference (Jui-Kuei Chen, and I Shuo Chen,2010).

2. The restaurant has an attractive building exterior infrastructure
3. The eating area attracts more customers
4. The waiter's attire is very tidy
5. The restaurant has hygienic restrooms, where is cleaned thoroughly
6. The menu is very attractive
7. The restaurant's interior décor is very attractive
8. The eating area is clean and comfortable
9. The restaurant seldom provides wrong meals to customers

3.3.3 Responsiveness

According to Parasuraman et al. [2008], the responsiveness of willing personnel involves alerting clients when things will be completed, offering thorough care, advertising services, and responding according to their needs. SERVQUAL 1994 lists responsiveness as the third dimension. It is eager to assist customers and deliver prompt service. This dimension highlights the need of paying close attention to and responding quickly to client requests, inquiries, complaints, and difficulties.

Customers may tell how responsive a company is by how long they have to wait for support, answers to questions, or attention to concerns. Responsiveness also refers to the concept of flexibility and the ability to tailor services to the specific needs of customers. The desire to assist clients respectfully and deliver timely services to suit their demands is referred to as responsiveness.

The willingness or timeliness of two key components are the emphasis of this dimension. As a result, you must ensure that consumers receive your services quickly and without delay, and that you make them feel as though you are genuinely interested in assisting them. The length of time it takes for a consumer to receive a response or a solution will determine responsiveness. In a nutshell, responsiveness entails swiftly resolving consumer issues by

providing required information or replacing products. A responsive dimension might look such as this:

1. The employee did not put any clients on hold and changed the product just before the commitment period ended. The surveys were adapted from a research focusing on Pete Stevens' and Bonnie Knutson's book *Cornel Hotel and Restaurant Administration Quarterly* and derived from it (Jui-Kuei Chen, and I Shuo Chen, 2010).

2. The waiters back each other often during busy hours.

3. The restaurant provides a timely service.

4. The restaurant assists in timely response to unique requests from customers

5. The waiter provides quick and prompt service.

3.3.4 Assurance

Warranty is defined as the courtesy and knowledge of employees, and their ability to convey trust and confidence to customers. Researchers have different opinions on the classification of guarantees in the dimension of service quality. Safety means allowing customers to understand the situation and listen to their opinions in their native language, regardless of their education level, age, and nationality. Parasuraman et al. [28] Point out that safety indicates the attitude behaviour of employees, and the ability of employees to provide friendly, confidential, courteous, and competent services. This means inspiring confidence and a sense of security.

Safety is defined as understanding the courtesy of employees and the ability of the company and its employees to inspire trust and confidence. This dimension may be particularly important for services where customers consider high growth and/or they are uncertain about their assessment capabilities. Trust and security can be built in the people who connect customers to the business, such as the marketing department. Therefore,

employees are aware of the importance of building customer trust for competitive advantage and customer loyalty. Protection means building trust and credibility for customers. It depends on the employees' technical knowledge, practical communication skills, courtesy, credibility, ability, and professionalism.

Therefore, these skills will help organizations gain the trust and credibility of customers. The security dimension combines factors such as competence, courtesy, credibility, and safety. Competence means possessing the necessary skills and knowledge. Politeness refers to the politeness, respect, consideration, and friendliness of the contact person. Honesty is the trustworthiness, credibility, and honesty of employees.

Safety means no danger, risk, or doubt. Examples of safety dimensions Employees show respect and courtesy when serving customers. The questionnaires are inferred from the scholar's past studies to reveal the Reliability of a subdimension of DINESERV, service quality (Jui-Kuei Chen, I Shuo Chen⁰ and Juliana Rocha, Antonio Carlos, 2014).

1. The restaurant waiters have good problem-solving abilities.
2. The waiters can explain the menu very precisely
3. Waiters provide a sense of satisfaction to the customers.
4. Waiters are well trained and disciplined.

3.3.5 Empathy

Empathizing customers must feel that the organization that provides the service prioritizes them. Empathy means caring, giving personalized attention, and serving customers. The core of empathy is conveying the customer's unique and special feelings. Parasuraman et al. [1988] noted that quantitative studies that have identified the dimensions of service quality models have used security, credibility, and access to measure empathy. This means inspiring confidence and security.

Safety is defined as an employee's understanding of courtesy and the ability of the company and its employees to inspire trust and confidence. This dimension may be particularly important for services where customers consider high growth and/or they are uncertain about their assessment capabilities. Trust and security can be built in the people who connect customers to the business, such as the marketing department.

Therefore, employees are aware of the importance of establishing trust and security among customers to gain a competitive advantage and retain them. Empathy means focusing on the customer to ensure that supportive and differentiated services are provided. In some countries in the world, serving each customer individually is a basic attitude. This is also a good process of psychologically satisfying customers and building trust, and loyalty. Because employees lack empathy, the company may lose customers; therefore, they need to ensure empathy. In addition, empathy is a combination of the following factors:

Access (physical and social)-Accessibility and ease of contact
Communication-Informing customers in a language that they understand and listen to
Understanding Customers-Striving to understand customers and your specific needs. For example, when customers speak, they will actively list. The questionnaires are considered from the scholar's past studies to reveal the Reliability of a subdimension of DINESERV, service quality (Jui-Kuei Chen, I Shuo Chen,²and Juliana Rocha, Antonio Carlos, 2014).

1. Waiters seldom ignore customers' doubts
2. The restaurants put the customers as their priority
3. Waiters always show their empathy towards customers.
4. Waiters are very responsive toward the customers in advance

3.4 Sampling and Data Collection

The research for the study would be by doing a quantitative data analysis by sending out a survey on google form, and the following link can be sent to social media such as Facebook, Linked In, Gmail, Instagram, and line. A hard copy of the next question will also be distributed in the Indian restaurants, where customers are coming to dine in.

The link or the hardcopy will follow the five scale Likert to get the correspondents' responses. The sample would be approx. To 350 respondents to do an efficient study. After collecting the data and meeting the requirements, the data will be exported into the SPSS (.sav) file. The method of analyzing the data stated in is the Data Analysis Procedure part.

3.5 Data Analysis Procedure

The research will use the latest SPSS version in the data analysis and understand the research gap along with the methodological technique such as:

1. Factor Loading and Reliability Test
2. ANOVA and Independent T-Test
3. Importance Performance Analysis

3.5.1 Reliability and Validity Test

The goal of factor analysis is to analyze the variance of a set of correlation coefficients. It can be related to exploratory and confirmatory purposes. The factor loading that is greater than 0.7 will select as a specific group of factors.

After finishing the analysis, the study will use Reliability to check the Cronbach's Alpha, item-to total correlation, and KMO. The Cronbach's Alpha must always be greater than 0.7, the item-total correlation should be greater than 0.5, and KMO should be higher than 0.5. If not meet the requirement, some items that are less will delete.

Confirmatory Factor Analysis used to define is a construct, and test whether the data collected with the hypotheses that already constructs ed or been not. In the CFA, the loading should be higher than 0.7. CFI value ranges from 0 to 1 (values greater than 0.90, conservatively 0.95 indicate good fit). RMSEA that is 0.1, 0.05, or 0.08 will be an excellent result, and the value higher than 0.1 are mediocre.

3.5.2 ANOVA and Independent T-test

ANOVA tests more than two groups, and T-test tests only two groups. This method is to try whether two groups or more than two groups are different in one relation of a single variable or not. We can say the t-test and ANOVA examine whether group means differ from one another.

3.5.3 Importance Performance Analysis (IPA)

IPA analysis is a measuring tool to understand customers' subjective feelings about the Performance of its services. It is a two-dimensional matrix graph divided into four quadrants:

- In the first quadrant: "Concentrate Here," the customer score is lower, but the importance score is much higher than the overall average score. This quadrant gives a sense of improvement and to be dealt is with immediately.
- The second quadrant of IPA says: "keep up the good work," where the overall satisfaction and attention score is higher than the average. It also indicates a competitive advantage.
- In this quadrant, the third quadrant, "Low Priority," both the customer satisfaction and attention scores are less than the overall average score. It also indicates that it doesn't require much attention at this moment.
- The fourth quadrant is "possible overkill," where customer satisfaction is higher than the overall average, but the importance score is lower than the average score; This indicates reducing the resources.

CHAPTER FOUR RESULT AND DISCUSSION

4.1 Descriptive Analysis

For the descriptive analysis part, it would be the respondent by recognizing the necessary information from them; moreover, it also displays the mean and standard deviation of all items in the survey questionnaire. The following would state as below Tin. The data were gathered through an online questionnaire survey has been sampling 200 respondents.

Characteristics of respondents

Table 4. 1 Characteristics of Respondents in this Research

Items	Description	Frequency	%
Gender	Male	79	39.5
	Female	121	60.5
Age	>24 age	18	9
	25-29	38	18.9
	30-35	60	29.9
	36-40	37	18
	<41	47	24.2
Education level	High school	19	10
	Bachelor	62	30.8
	Master	119	59.2

Table 4.1 displays the respondent characteristics of respondents, including gender, age, and education level. It shows that most respondents were female (60.5%). The majority respondents ages were 30-35 (29.9% followed by over 41 (23.4%), and most low respondents were under 24 years old (Regarding About education 9.5% of respondents had a high school, 30.8% of the respondents had a bachelor's degree, and 59.2% of

respondent's masters and higher degrees.

4.2 Factor Analysis and Reliability Test of Importance

Factor analysis is between the independent variable (job satisfaction) and dependent variables (supervisor, welfare, employee training and development, workload, institution commitment) must be constructed analysis. There are several criteria that must be followed in factor analysis and reliability tests Kaiser-Meyer-Olkin Measure of Sampling KMO) higher than 0.5 to be acceptable.

4.2.1 Reliability

After conducting the factor analysis and reliability test, the 6 items of Reliability in Table 4.2 were better than the requirement mention above KMO of reliability was 0.526, eigenvalue was 33.109. Moreover, reliability had cumulative a total of 33.109% which showed these were critical underlying factors for this construct. The loading of most of the items was bigger than 0.6 also, all items-to-total correlation of reliability was above less than 0.05, and the Cronbach's Alpha (0.520) was also less than 0.7. Based on all requirement that the reliability and internal consistency are unsuitable.

Table 4. 2 Results of factor analysis and reliability test of Reliability

Research Construct	Research Items	Factor Loading	Eigen-value	Cumulative Explained	Item-to-total correlation	Cronbach's Alpha (α)
Reliability importance (RI) KMO (0.526)	RI1	0.181	33.109	33.109	1.000	0.520
	RI2	0.065			0.298	
	RI3	0.832			0.248	
	RI4	0.822			0.050	
	RI5	0.539			0.028	
	RI6	0.539			-0.194	

Note: RI= Reliability importance

Quality Source: Original Study

4.2.2 Tangible

The KMO of these seven items of Tangible in Table 4.3 were better than the requirement of 0.5, eigenvalue was 51.209. Tangible service quality had relative a total of 51.209% which show that these are important underlying factors for this construct. Factors loading of most of the item greater than 0.6. Additionally, all items-to-total correlation of Tangible was not lower than 0.5, and the Cronbach's Alpha (0.839) was not smaller than 0.7 with value a of 0.83 of 9. Based on all requirements it inferred that the reliability and internal consistency are suitable.

Table 4. 3 Results of factor analysis and reliability test on Tangible

Research Construct	Research Items	Factor Loading	Eigen -value	Cumulative Explained	Item-to-total correlation	Cronbach's Alpha (α)
Tangible importance (TI) KMO (0.767)	TI1	0.120	51.209	51.209	0.100	0.839
	TI2	-0.001			0.321	
	TI3	0.806			0.086	
	TI4	0.861			0.031	
	TI5	0.900			0.069	
	TI6	0.894			0.127	
	TI7	0.827			0.081	
	TI8	0.705			0.097	
	TI9	0.642			0.043	

Note: TI= Tangible importance
Quality Source: Original Study

4.2.3 Responsiveness

The KMO of the four items of responsiveness of service quality in Table 4.4 were better than the requirement of 0.50, eigenvalue was 68.550. The reliability had cumulative a total of 68.550% which showed these are important underlying factors for this construct. The loading of items was above 0.06. Besides, all items-to-total correlation of responsiveness was

above 0.5, and the Cronbach's Alpha (0.836) was also bigger than 0.7. Based on all requirements, it inferred that the reliability and internal consistency are suitable.

Table 4. 4 Results of factor analysis and reliability test on Responsiveness

Research Construct	Research Items	Factor Loading	Eigen-value	Cumulative Explained	Item-to-total correlation	Cronbach's Alpha (α)
Responsive importance (IRP) KMO (0.535)	RPI1	0.836	68.550	68.550	0.100	0.836
	RPI2	0.594			0.277	
	RPI3	0.977			0.796	
	RPI4	0.859			0.599	

Note: RI= Responsiveness importance
Quality Source: Original Study

4.2.4 Assure

Most of the factor loading is greater than 0.6 and the highest is A5 with a factor loading of 0.887 indicating this item had the highest relation to compatibility. In table 4.5. All the item total correlations are less than 0.5. Cronbach's Alpha greater than 0.6 and eigenvalue greater than 1 as shown below compatibility Cronbach's $\alpha = 0.771$ and eigenvalue = 53.561. The reliability had accumulated a total of 53.561% of explained variance shows these are important underlying factors for this construct. Based on all criteria, we can conclude that the reliability and internal consistency of this factor are acceptable.

Table 4. 5 Results of factor analysis and reliability test on Assure

Research Construct	Research Items	Factor Loading	Eigen-value	Cumulative Explained	Item-to-total correlation	Cronbach's Alpha (α)
Assure importance (AI) KMO (0.740)	AI1	0.473	53.561	53.561	0.100	0.771
	AI2	0.736			0.204	
	AI3	0.887			0.306	
	AI4	0.803			0.188	
	AI5	0.694			0.319	

Note: AI= Assure importance
Quality Source: Original Study

4.2.5 Empathy

After doing the factor Analysis and Reliability Test on Empathy has been shown the Table 4.6 that, most of the items have Factor Loading higher than 0.6. Most of the item total correlations are less than 0.5. Cronbach's Alpha is bigger than 0.6 and the eigenvalue greater than 1 as shown below in the table the compatibility of Cronbach's Alpha is 0.668 and the eigenvalue 43.922. The reliability had accumulated a total of 43.922% of explained variance shows these are important underlying factors for this construct.

Table 4. 6 Results of factor analysis and reliability test on Empathy

Research Construct	Research Items	Factor Loading	Eigen-value	Cumulative Explained	Item-to-total correlation	Cronbach's Alpha (α)
Empathy importance (EI) KMO (0.614)	EI1	0.826	43.922	43.922	0.100	0.668
	EI2	0.738			0.570	
	EI3	0.642			0.364	
	EI4	0.468			0.137	
	EI5	0.582			0.462	

Note: EI= Reliability importance
Quality Source: Original Study

4.3 Independent T-test of Importance

To verify whether there is a difference between Reliability importance (RI) and its sub variables, Tangible importance (TI), Responsive importance (RI), Assure importance (AI), and Empathy importance (EI) with gender, this study was conducted a t-test 4.7 showed that there is different thinking between

Each factor on Reliability importance (RI) and its sub variables, Tangible importance (TI), Responsive importance (RI), Assure importance (AI), and Empathy importance (EI) because the p-value of all factors are higher than 0.05 that requirement id that the p-value should be lower than 0.05 so it will have the significance of different thinking. This result indicate that male and female had the same thinking in this study.

Table 4. 7 The difference in “Factors” on “Gender”

Factors and items		Each variable		Each factor	
		t- value	p- value	t- value	p- value
Reliability importance	RI1	-2.04	0.839	-0.054	0.957
	RI2	0.094	0.926		
	RI3	0.013	0.989		
	RI4	0.369	0.713		
	RI5	-1.26	0.900		
	RI6	-0.204	0.839		
Tangible importance	TI1	-0.447	0.656	0.373	0.710
	TI2	-0.138	0.891		
	TI3	0.694	0.490		
	TI4	0.616	0.540		
	TI5	0.301	0.764		
	TI6	0.674	0.502		
	TI7	0.100	0.920		
	TI8	0.296	0.768		
	TI9	0.136	0.892		
Responsive	RPI1	0.114	0.909	0.507	0.614
	RPI2	-0.135	0.893		

importance	RPI3	0.507	0.614		
	RPI4	0.634	0.528		
Assure importance	AI1	0.642	0.523	-0.143	0.887
	AI2	-0.018	0.985		
	AI3	-0.335	0.738		
	AI4	-0.455	0.650		
	AI5	-0.248	0.804		
Empathy importance	EI1	-0.660	0.511	-0.061	0.952
	EI2	-0.117	0.907		
	EI3	0.433	0.666		
	EI4	0.546	0.587		
	EI5	-0.156	0.877		

Significant value has: * $p < 0.05$, ** $p < .01$, *** $p < .001$

4.4 ANOVA test of Importance

The one-way ANOVA procedure unilaterally analyzes the numerically dependent variables for a single factor (independent) variable. Variance analysis is used to test the assumption that several methods are equal. This technique is an experimental extension of two samples. There was a statistically significant difference between groups was determined by one-way ANOVA. In these results, age between all factors is reliability is significant. Table 4.8 shows the differences in factors between ages. In the table all variables no differ in from age. There were statistically significant differences checked with ANOVA Reliability importance ($F=9.46$, $p=0.00$, $p < 0.10$), Tangibility importance ($F=8.05$, $p=0.00$, $p=0.00$), Responsive importance ($F=6.41$, $p=0.00$, $p < 0.10$), Assurance importance ($F=4.53$, $p=0.04$, $p < 0.05$), Empathy importance ($F=9.49$, $p=0.00$, $p=0.00$) significant in all factors.

Table 4. 8 The difference in “Factors” on “Age”

Factors	Each factor	
	F- value	P- values
Reliability importance	9.46***	0.00

Tangibility importance	8.05***	0.00
Responsive importance	6.41***	0.00
Assurance importance	4.53**	0.04
Empathy importance	9.49***	0.00

Significant value *** $p < 1\%$, ** $p < 5\%$, * $p < 10\%$

In table 4.9 there was a statistically significant difference between groups was determined by one-way ANOVA. In these results, the education level between all factors is reliable significantly. This means there is a significant difference between the means of different levels of education variables.

Table 4. 9 The difference in “Factors” on “Education

Factors	Each factor	
	F- value	P- values
Reliability importance	9.46***	0.00
Tangibility importance	8.05***	0.00
Responsive importance	6.41***	0.00
Assurance importance	4.53**	0.04
Empathy importance	9.49***	0.00

4.5 Factor Analysis and Reliability Test of Performance

4.5.1 Reliability

After conducting the factor analysis and reliability test, the 6 items of Reliability were better than the requirement mention above KMO of reliability was 0.793, eigenvalue was 69.152. In table 4.10. Moreover, reliability had cumulative a total of 69.152% which showed these were critical underlying factors for this construct. The loading of each item was bigger than 0.6 also, most of the items-to-total correlation of reliability was above 0.05, and the Cronbach’s Alpha (0.868) was also greater than 0.7. Based on all requirements, it inferred that the reliability and internal consistency are suitable

Table 4. 10 Results of factor analysis and reliability test on Reliability

Research Construct	Research Items	Factor Loading	Eigenvalue	Cumulative Explained	Item-to-total correlation	Cronbach's Alpha (α)
Reliability (R) KMO (0.793)	R1	0.933	69.152	69.152	1.000	0.868
	R2	-0.005			-0.35	
	R3	0.941			0.958	
	R4	0.825			0.692	
	R5	0.939			0.803	
	R6	0.913			0.778	

Note: RI= Reliability importance
Quality Source: Original Study

4.5.2 Tangible

The KMO of these nine items of Tangible in Table 4.11 were better than the requirement of 0.5, eigenvalue was 61.839. Tangible cumulative a total of 61.839% which shows that these are important underlying factors for this construct. Factors loading of each item is greater than 0.6. Additionally, all items-to-total correlation of Tangible was not lower than 0.5, and the Cronbach's Alpha (0.917) was not smaller than 0.7. Based on requirements, it inferred that the reliability and internal consistency are suitable.

Table 4. 11 Results of factor analysis and reliability test on Tangible

Research Construct	Research Items	Factor Loading	Eigenvalue	Cumulative Explained	Item-to-total correlation	Cronbach's Alpha (α)
Tangible (T) KMO (0.851)	T1	0.756	61.839	61.839	0.100	0.917
	T2	0.480			0.544	
	T3	0.676			0.328	
	T4	0.815			0.463	
	T5	0.883			0.550	
	T6	0.922			0.711	
	T7	0.912			0.686	
	T8	0.654			0.437	
	T9	0.869			0.613	

Note: T= Tangible importance
Quality Source: Original Study

4.5.3 Responsive

The KMO of the four items of responsive in Table 4.12 were better than the requirement of 0.704, eigenvalue was 51.184. The reliability had cumulative a total of 51.184% which showed these are important underlying factors for this construct. The loading of items was above 0.06. Besides, all items-to-total correlation of responsiveness were above 0.5, and even though the Cronbach's Alpha (0.677) was also small than 0.7. Based on all requirements, it inferred that the reliability and internal consistency are suitable.

Table 4. 12 Results of factor analysis and reliability test on Responsive

Research Construct	Research Items	Factor Loading	Eigenvalue	Cumulative Explained	Item-to-total correlation	Cronbach's Alpha (α)
Responsive (RP) KMO (0.704)	RP1	0.798	51.184	51.184	0.100	0.677
	RP2	0.640			0.402	
	RP3	0.764			0.451	
	RP4	0.646			0.362	

Note: RP= Responsive importance
Quality Source: Original Study

4.5.4 Assure

Most of the items have a factor loading greater than 0.6. In table 4.13. So, most of the item to total correlation is less than 0.5. Cronbach's Alpha greater than 0.6 and eigenvalue 49.868 as shown below compatibility Cronbach's $\alpha=0.726$. The reliability had cumulative a total of 49.868% of explained variance shows these are important underlying factors for this construct. Based on all criteria, we can conclude that the reliability and internal consistency of this factor are not acceptable.

Table 4. 13 Results of factor analysis and reliability test on Assure

Research Construct	Research Items	Factor Loading	Eigenvalue	Cumulative Explained	Item-to-total correlation	Cronbach's Alpha (α)
Assure (A) KMO (0.604)	A1	0.677	49.868	49.868	0.100	0.726
	A2	0.616			0.505	
	A3	0.367			0.201	
	A4	0.870			0.369	
	A5	0.874			0.349	

Note: A= Assure importance
Quality Source: Original Study

4.5.5 Empathy

After doing the Factor Analysis and Reliability Test on Empathy had shown in Table 4.14 that, except E5 all items have Factor Loading greater than 0.6. Except for E5 all items to total correlation are greater than 0.5.

Cronbach's Alpha is bigger than 0.6 the and eigenvalue greater than 1 as shown below in the table that compatibility Cronbach's Alpha = 0.815 and eigenvalue = 66.935. The reliability had cumulative a total of 66.935% of explained variance shows these are important underlying factors for this construct.

Table 4. 14 Results of factor analysis and reliability test on Empath

Research Construct	Research Items	Factor Loading	Eigenvalue	Cumulative Explained	Item-to-total correlation	Cronbach's Alpha (α)
Empathy (E) KMO (0.784)	E1	0.951	66.935	66.935	0.100	0.815
	E2	0.942			0.859	
	E3	0.962			0.968	
	E4	0.793			0.620	
	E5	0.013			0.043	

Note: E=Empathy importance
Quality Source: Original Study

4.6 Independent T-test of Performance

Table 4.15 showed that there is different thinking. Each factor on Reliability importance (RI) and its sub variables, Tangible importance (TI), Responsive importance (RI), Assure importance (AI), and Empathy importance (EI) because except for Assure p-value of all factors are higher than 0.05 that requirement. It's will have the significance of different thinking. This result indicate that male and female had the same thinking in this study.

Table 4. 15 The difference in "Factors" on "Gender"

Factors and items	Each variable		Each factor	
	t- value	p- value	t- value	p- value

Reliability	R1	0.213	0.832	0.010	0.992
	R2	-0.743	0.459		
	R3	0.153	0.879		
	R4	-0.196	0.845		
	R5	0.198	0.843		
	R6	0.260	0.795		
Tangible	T1	0.491	0.625	0.253	0.801
	T2	1.023	0.310		
	T3	-0.096	0.924		
	T4	0.187	0.852		
	T5	0.424	0.673		
	T6	0.213	0.832		
	T7	0.144	0.886		
	T8	-0.376	0.708		
	T9	0.044	0.965		
Responsive	RP1	-0.099	0.921	0.381	0.704
	RP2	0.781	0.437		
	RP3	0.308	0.759		
	RP4	0.261	0.795		
Assure	A1	0.467	0.642	0.804	0.424
	A2	0.289	0.774		
	A3	0.737	0.463		
	A4	0.672	0.504		
	A5	0.557	0.579		
Empathy importance	EI1	0.667	0.507	0.667	0.507
	EI2	0.551	0.583		
	EI3	0.672	0.504		
	EI4	0.316	0.753		
	EI5	0.317	0.752		

Quality Source: Original Study

4.7 ANOVA test of Performance

This study customers the ANOVA to identify if there exist a significant difference among the background factors (age, education level) with the five

research constructs that were reliability, tangibility, responsive, assurance, and empathy. There were statistically significant differences in only one factor within the five constructs among different age groups. In these results, age between all factors is reliability are significantly. Table 4.16 shows the differences in factors between ages. In table all variables no difference from age. There were statistically significant differences checked with ANOVA Tangibility importance (F=3.17, p=0.00, p<0.05), Responsive importance (F=4.57, p=0.00, p=0.00), Assurance importance (F=5.24, p=0.00, p=0.00), Empathy importance (F=3.35, p=0.04, p<0.05) significant in all factors.

Table 4. 16 The difference in “Factors” on “Age”

Factors	Each factor	
	F- value	P- values
Reliability	2.49	0.24
Tangibility	3.17*	0.05
Responsive	4.57***	0.00
Assurance	5.24***	0.00
Empathy	3.35**	0.04

Quality Source: Original Study

The results showed in table 4.17 below. There were statistically significant differences in some factors within the five constructs among different educational levels groups. From the above description, it showed education is not significant in all factors.

Table 4. 17 The difference in “Factors” on “Education”

Factors	Each factor
---------	-------------

	F- value	P- values
Reliability	3.78*	0.06
Tangibility	4.04**	0.04
Responsive	4.76***	0.01
Assurance	6.11***	0.00
Empathy importance	4.00**	0.04

Quality Source: Original Study

4.8 Importance Performance Analysis

Table 4.18 represents the mean scores of the 5 dimensions and their attributes for guests in Chilliesine restaurant, Taiwan in relation to Importance and Performance. The data were then transferred to the IPA grid presentation. Data analysis was done by SPSS v 28.0.

Table 4. 18 Mean ratings of Importance and Performance of selection factors and attribute

Items	Dimensions	Performance	Performance	Importance	Importance
		Mean	S. D	Mean	S. D
TA 1	Tangible	3.34		3.78	
TA 2		3.1		3.21	
TA 3		3.58		4.34	
TA 4		3.43		4.26	
TA 5		3.32		4.15	
TA 6		3.43		4.26	
TA 7		3.45		4.08	
TA 8		3.78		4.26	
TA 9		3.55		3.85	
RL 1	Reliability	3.43		3.67	
RL 2		2.93		3.25	
RL 3		3.46		3.97	
RL 4		3.67		4.21	
RL 5		3.47	0.258	3.19	0.338
RL 6		3.44		3.89	
RN 1	Responsiveness	3.62		4.11	
RN 2		3.17		3.55	
RN 3		3.34		4.25	
RN 4		3.42		4.26	
AS 1	Assurance	3.26		4.09	

AS 2		3.41		3.95	
AS 3		3.08		3.65	
AS 4		3.13		3.49	
AS 5		3.17		3.92	
EN 1	Empathy	3.15		3.77	
EN 2		3.21		4	
EN 3		3.13		4.13	
EN 4		3.32		4.33	
EN 5		4.26		3.78	
	Mean	3.381		3.91	

Quality Source: Original Study

Table 4. 19 Cronbach's α For Performance Analysis and the Importance of Each Dimension comparison

No.	Dimension	Cronbach's α of Performance	Cronbach's α of Importance
1	Reliability	0.520	0.868
2	Responsiveness	0.839	0.917
3	Empathy	0.836	0.677
4	Assurance	0.771	0.726
5	Tangible	0.668	0.815

Quality Source: Original Study

Table 4. 20 Results of Paired t-Test of Importance and Performance for Each Dimension comparison

Dimensions	Items	Mean of Performance	t-test	p-value	t-value mean	p-value mean
Tangible	1	3.34	-0.447	0.656		
	2	3.1	-0.138	0.891		
	3	3.58	0.694	0.490		
	4	3.43	0.616	0.540		
	5	3.32	0.301	0.764	0.373	0.710
	6	3.43	0.674	0.502		
	7	3.45	0.100	0.920		
	8	3.78	0.296	0.768		
	9	3.55	0.136	0.892		
Reliability	1	3.43	-2.04	0.839		
	2	2.93	0.094	0.926		
	3	3.46	0.013	0.989	-0.054	0.957
	4	3.67	0.369	0.713		
	5	3.47	-1.26	0.900		
Reliability	6	3.44	-0.204	0.839		
	1	3.62	0.114	0.909		
	2	3.17	-0.135	0.893	0.507	0.614
Assurance	3	3.34	0.507	0.614		
	4	3.42	0.634	0.528		
	1	3.26	0.642	0.523		
	2	3.41	-0.018	0.985		
	3	3.08	-0.335	0.738	-0.143	0.887
Empathy	4	3.13	-0.455	0.650		
	5	3.17	-0.248	0.804		
	1	3.15	-0.660	0.511		
	2	3.21	-0.117	0.907		
	3	3.13	0.433	0.666	-0.061	0.952
	4	3.32	0.546	0.587		
	5	4.26	-0.156	0.877		
Mean						

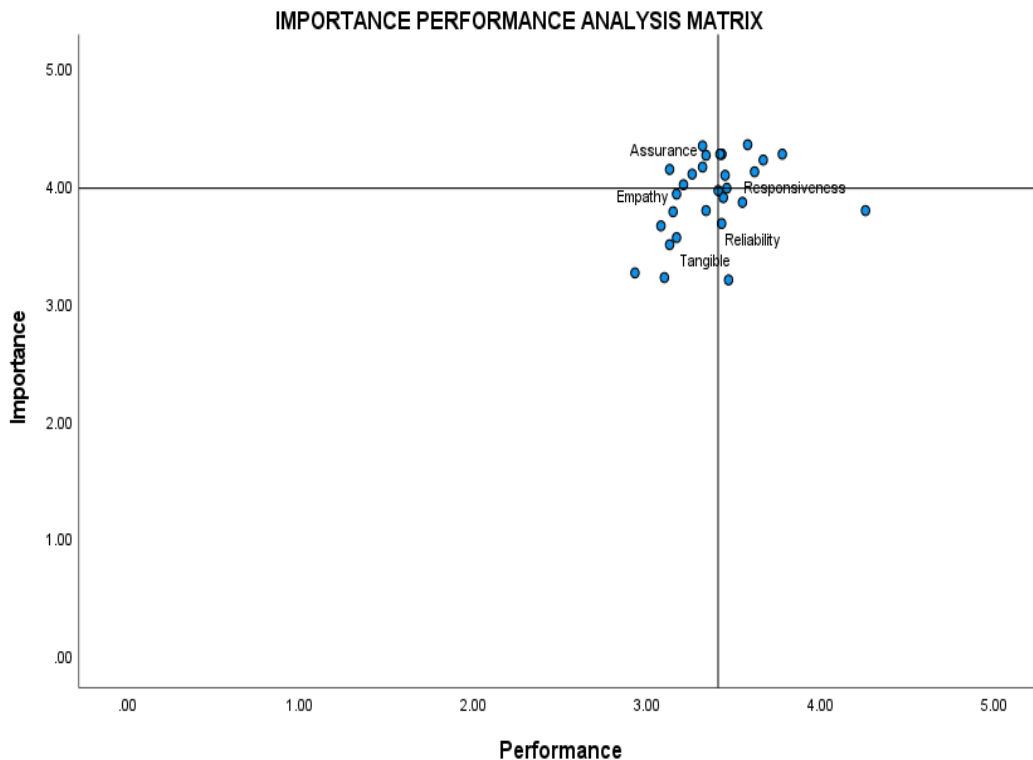
Quality Source: Original Study

Dimensions	Items	Mean of	t-test	p-value	t-value	p-value
-------------------	--------------	----------------	---------------	----------------	----------------	----------------

		Importance			mean	mean
Tangible	1	3.78	0.491	0.625		
	2	3.21	1.023	0.310		
	3	4.34	-0.096	0.924		
	4	4.26	0.187	0.852		
	5	4.15	0.424	0.673	0.010	0.992
	6	4.26	0.213	0.832		
	7	4.08	0.144	0.886		
	8	4.26	-0.376	0.708		
	9	3.85	0.044	0.965		
Reliability	1	3.67	0.213	0.832		
	2	3.25	-0.743	0.459		
	3	3.67	0.153	0.879	0.253	0.801
	4	3.25	-0.196	0.845		
	5	3.97	0.198	0.843		
Responsiveness	6	4.21	0.260	0.795		
	1	3.19	-0.099	0.921		
Assurance	2	3.89	0.781	0.437	0.381	0.704
	3	4.11	0.308	0.759		
	4	3.55	0.261	0.795		
	1	4.25	0.467	0.642		
	2	4.26	0.289	0.774		
Empathy	3	4.09	0.737	0.463	0.804	0.424
	4	3.95	0.672	0.504		
	5	3.65	0.557	0.579		
	1	3.49	0.667	0.507		
	2	3.92	0.551	0.583		
	3	3.77	0.672	0.504	0.667	0.507
	4	4.33	0.316	0.753		
5	3.78	0.317	0.752			
Mean						

Figure 4. 1 The above figure represents the Importance Performance Analysis

(IPA) Grid



The X-axis in Figure 4.1 depicts the perception of Performance scores linked to the customer experience of Chilliesine restaurant's services and amenities. The Y-axis reflects the respondents' relative importance of the five Importance elements or aspects when picking the restaurant. The pooled data's mean Importance rating was 3.91, while the mean Performance rating was 3.381. The four quadrants are created using SPSS v 28.0 statistical software with the mean scores of the Importance and Performance evaluations.

Figure 4.1 shows that one-factor “Assurance” was identified in the ‘concentrate here’ quadrant I, one “Responsiveness in the ‘keep up the good work’ quadrant II, two, “Tangibles” and” Empathy” in the ‘low priority quadrant III and “Reliability” in the ‘possible overkill’ quadrant IV.

Figure 5.1 shows that extra attention should be paid to the dimension

"assurance," which is in the IPA matrix grid's "Concentrate here" zone. It signifies that customer were not confident and comfortable with the restaurant's dealings, and the management staff lacked problem-solving skills and did not provide enough information about the menu, items, and preparation processes. To get a competitive advantage in the market, the restaurant must work on this area and employ well-trained, professional personnel with good problem-solving skills.

In the quadrant 'keep up the good work,' we have the following dimension: reactivity, which was a highly ranked component on the performance grade scale. This implies that the restaurant was able to deliver swift and prompt services to customers, dealt with consumers with good humor, made extra attempts to handle client requests, and didn't lose their cool even during the busiest of ours when dealing with their client's needs.

The third quadrant was called 'low priority because the factors in this area were considered relatively less important, although the actual performance is below the mean score of all the other attributes' performances (Lee & Lee, 2009). This quadrant contains the factors 'Empathy and Tangibles' that received the lowest grades on the performance scale.

The quadrant 'possible overkill' contains the 'reliability' factor. The importance of this attribute is low, but their actual performance is higher than the mean score of the overall performance. This also meant that the restaurant was dependable and consistent in performance. The respondents ranked the dimension of the quality of restaurant service that refers to the reliability of the employees the lowest but at the same time, they are satisfied with the performance, which is better than other dimensions that refer to the 'tangible' dimension and 'empathy'.

CHAPTER FIVE CONCLUSIONS

Based on Importance performance analysis, the goal of this study is to discover the relationship between service quality and customer satisfaction (IPA). The DINESERV model is also utilized to illustrate the possible relationship between these two structures, i.e., "Importance and ".

The author's decision to choose this model is based on two major factors. Unlike the SERVQUAL methodology, Stevens et al. (1995) developed DINESERV to efficiently quantify restaurant service quality. Second, two studies completed in Taiwan utilizing comparable methodologies of service quality analysis, (Chen et al. (2010) and (Ahmed, 2003), have piqued my curiosity in using this quality-of-service model for my research thesis.

Their study examined DINESERV's efficacy in the East Asian cultural context. As a result, the efficiency of the DINESERV tool in the East Asian environment was investigated in this study. In addition, factor analysis was utilized to evaluate DINESERV's efficacy in Taichung, Taiwan, and the results revealed that these factors monitored similar elements and had a correlation. To put it another way, factor loadings reveal related parts in each component. At this point, the study had solved one of my research questions by confirming the applicability of DINESERV in Taiwanese eateries (Chilliesine). Cronbach's alpha is used to test the internal consistency of the tools or scales employed in this process. The relationship between customer satisfaction and DINESERV's service quality aspects is also investigated in this study.

Finally, the results showed that the interviewees (Customers) believed that the overall quality of the Chilliesine restaurant service was strong. However, the aspect of “assurance “was perceived as low and required more attention and continuous improvement by managers to gain a competitive

advantage over their peers. However, clients were very excited about other aspects offered by the restaurant (responsiveness, reliability, tangibility, and empathy).

5.1 Implications

The demographics of this study indicate that most respondents were in this age group (i.e., 30- 35) & were mostly females, which I think is useful information for managers and marketing departments. Companies may use this information for marketing purposes (such as promotion and strategy formulation).

Therefore, for example, when designing a strategy, the restaurant does not need to personalize and locate most of its resources for this age group. Managers must pay all the necessary attention and effort to this market segment because the cost of attracting new customers is 5 times higher than that of retaining existing customers (Jia Wertz, 2018). In addition, leveraging/assurance of what is considered a lower dimension will be the key to satisfying this customer base. In addition, it will also increase the restaurant's return on investment, as the information from demographic data minimizes the manager's efforts to devote his resources to this market segment. In other words, managers will not waste their time and resources to find the right strategy to reach their customers, because the age group buying most of their products is certain.

The three dimensions (reliability, responsiveness, tangibles) of DINESERV are considered very well, which means that the restaurant's performance is satisfactory. The dimensions of responsiveness and reliability show high scores. Therefore, this information allows managers to set their strategic objectives in the improvement dimension. Also, this information should be communicated to other staff members for the best results. As

suggested by Stevens et al. (1995), they can also use DINESERV.PER every two to three months to measure client perceptions and compare scores for further improvement. It turns out that for Taiwan, DINESERV is an efficient and reliable tool, which can be used as a cornerstone for future researchers who are interested in studying this huge industry through DINESERV and other attributes. There is no doubt that it will provide useful information about the literature.

5.2 Social implication

As mentioned in the literature review, DINESERV is an important tool for determining the quality of restaurant service. In addition, its effectiveness can lead to different results in different cultural environments. However, this study confirmed its effectiveness using factor analysis.

This result will allow restaurants (in Taiwan) to use the tool to regularly measure the quality of their services every two to three months. Therefore, it will allow restaurant owners to detect all possible gaps between customer perception and service quality expectations. Therefore, restaurant owners will take necessary modifications to improve their service quality.

This scenario will bring mutual benefits to customers and restaurants. On the one hand, it will bring a higher return on investment (ROI) for restaurants. Because all the improvements you make after you regularly evaluate customer perceptions will make customers more satisfied. On the other hand, customers can also get high-quality service at the price and time they put in when they dine outdoors.

5.3 Limitation

Restriction Resources are scarce, of which the most precious is "time". Hence, our study had some limitations. Since I am doing a one-year master's thesis, I only did research at one place, the Chilliesine restaurant in Taichung, Taiwan. Also, if I could interview employees, including top-level employees, just to stretch the research to the limit and bring in a lot of new insights, and explore other cities around Taiwan. it would have been much better. However, due to time constraints in my thesis, it was not possible to accomplish this. The sampling technique used was non-probability sampling (That is, convenience sampling). Therefore, the study cannot be generalized. This is because time is short, there is no sampling frame, and the cost of doing so is a bit high.

5.4 Recommendations for future research

The restaurant sector is rapidly evolving, and many academics are interested in studying the impact of service quality on consumer satisfaction. Taiwan is also used in this study to examine the relationship between these two frameworks. DINESERV has also shown to be a highly effective and dependable tool. Customer happiness is influenced by a variety of elements, including price, technology, and products. As a result, future researchers can combine these characteristics with the DINESERV instrument to add to the literature. Furthermore, because this study used non-probability sampling, it cannot be applied to the entire population.

Therefore, I recommend that future researchers employ probability sampling in their studies. Additionally, it will be beneficial if they can manage to assess the impact of service quality in various restaurant types (i.e., upscale, fine dining, casual dining, and so on).

REFERENCE

1. Abdelaty, Y., & Abdel-Aal, E. (2017). Assessment of University Residence Food service Using Importance-Performance Analysis (IPA): Student Perspective (A Case Study of Sadat City University). *International Journal of Heritage, Tourism and Hospitality*, 11(1), 123-141.
2. Afacan, Y. (2019). Extending the importance–performance analysis (IPA) approach to Turkish elderly people’s self-rated home accessibility. *Journal of Housing and the Built Environment*, 34(2), 619-642.
3. Afthanorhan, A., Awang, Z., Rashid, N., Foziah, H., & Ghazali, P. (2019). Assessing the effects of service quality on customer satisfaction. *Management Science Letters*, 9(1), 13-24.
4. Ali, B. J., Saleh, P. F., Akoi, S., Abdulrahman, A. A., Muhamed, A. S., Noori, H. N., & Anwar, G. (2021, May). Impact of Service Quality on the Customer Satisfaction: Case study at Online Meeting Platforms. In Ali, B.J, Saleh, Akoi, S., Abdulrahman, AA, Muhamed, AS, Noori, HN, Anwar, G.(2021). *Impact of Service Quality on the Customer Satisfaction: Case study at Online Meeting Platforms. International journal of Engineering, Business and Management* (Vol. 5, No. 2, pp. 65-77).
5. Allen, J., Bellizzi, M. G., Eboli, L., Forciniti, C., & Mazzulla, G. (2021). Identifying strategies for improving airport services: Introduction of the Gap-IPA to an Italian airport case study. *Transportation Letters*, 13(3), 243-253.
6. Azzopardi, E., & Nash, R. (2013). A critical evaluation of importance–performance analysis. *Tourism management*, 35, 222-233.
7. Bacon, D. R. (2003). A comparison of approaches to importance-performance analysis. *International Journal of Market Research*, 45(1), 1-15.
8. Bae, J., & Nam, S. (2020). A Study on the Improvement Plan of Facility in National Park Using Importance-Performance Analysis. *Journal of Environmental Management & Tourism*, 11(1 (41)), 125-130.
9. Chen, S. H., Pai, F. Y., & Yeh, T. M. (2019). Using the Importance–Satisfaction Model and Service Quality Performance Matrix to Improve Long-Term Care Service Quality in Taiwan. *Applied Sciences*, 10(1), 85.

10. CHERANCHERY, M. F., PRASAD, P., & MAITRA, B. (2018). Identifying management strategies for the improvement of urban bus services: A case study in Kolkata. *Asian Transport Studies*, 5(1), 81-97.
11. Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *Journal of marketing*, 56(3), 55-68.
12. Das, A., S. El Masry, M., Gnyawali, S. C., Ghatak, S., Singh, K., Stewart, R., ... & Khanna, S. (2019). Skin transcriptome of middle-aged women supplemented with natural herbo-mineral shilajit shows induction of microvascular and extracellular matrix mechanisms. *Journal of the American College of Nutrition*, 38(6), 526-536.
13. Dinçer, H., Yüksel, S., & Martinez, L. (2019). Analysis of balanced scorecard-based SERVQUAL criteria based on hesitant decision-making approaches. *Computers & Industrial Engineering*, 131, 1-12.
14. Dinçer, H., Yüksel, S., & Pınarbaşı, F. (2019). SERVQUAL-based evaluation of service quality of energy companies in Turkey: strategic policies for sustainable economic development. In *The circular economy and its implications on sustainability and the green supply chain* (pp. 142-167). IGI Global.
15. Djeri, L., Stamenković, P., Blešić, I., Milićević, S., & Ivkov, M. (2018). An importance-performance analysis of destination competitiveness factors: case of Jablanica district in Serbia. *Economic Research-Ekonomska Istraživanja*, 31(1), 811-826.
16. Ennew, C. T., Reed, G. V., & Binks, M. R. (1993). Importance-performance analysis and the measurement of service quality. *European journal of marketing*, 27(2), 59-70.
17. Feng, M., Mangan, J., Wong, C., Xu, M., & Lalwani, C. (2014). Investigating the different approaches to importance-performance analysis. *The Service Industries Journal*, 34(12), 1021-1041.
18. Ganguly, K., & Rai, S. S. (2018). Evaluating the key performance indicators for supply chain information system implementation using IPA model. *Benchmarking: An International Journal*.
19. Hammoud, J., Bizri, R. M., & El Baba, I. (2018). The impact of e-banking service quality on customer satisfaction: Evidence from the Lebanese banking sector. *Sage Open*, 8(3), 2158244018790633.
20. Harvey, J. (1998). Service quality: a tutorial. *Journal of operations management*, 16(5), 583-597.
21. Hu, M. L. M., & Yuan, Y. H. (2020). Constructing the assessment scale of youth's restaurant entrepreneurship competency: the Case of Taiwan. *Sage Open*, 10(1), 2158244019900566.

22. Huang, C. H., & Tseng, H. Y. (2020). An exploratory study of consumer food waste attitudes, social norms, behavioral intentions, and restaurant plate waste behaviors in Taiwan. *Sustainability*, 12(22), 9784.
23. Huang, J. C. (2018). Application of Kano model and IPA on improvement of service quality of mobile healthcare. *International Journal of Mobile Communications*, 16(2), 227-246.
24. Jebraeily, M., Rahimi, B., Fazlollahi, Z. Z., & Afshar, H. L. (2019). Using SERVQUAL model to assess hospital information system service quality. *Hormozgan Medical Journal*, 23(1), e86977-e86977.
25. Jeong, N. R., Kim, K. J., Yoon, J. H., Han, S. W., & You, S. (2020). A Study on the Application of IPA Method for Exploring the Properties of Urban Residents' Choice of Indoor Plants. *인간식물환경학회지 (JPPE)*, 23, 603-614.
26. Jundillah, M. L., Suseno, J. E., & Surarso, B. (2019). Evaluation of E-learning Websites Using the Webqual Method and Importance Performance Analysis. In *E3S Web of Conferences* (Vol. 125, p. 24001). EDP Sciences.
27. Kang, S. (2020). A Study on the Job Analysis of National and Public University Records Management Using IPA. *Journal of Korean Society of Archives and Records Management*, 20(1), 89-114.
28. Karamustafa, K., & Ülker, P. (2020). Impact of tangible and intangible restaurant attributes on overall experience: a consumer oriented approach. *Journal of Hospitality Marketing & Management*, 29(4), 404-427.
29. Karnreungsiri, I. (2022). Applying Importance-Performance Analysis for Developing a Model of Quick Service Restaurant Innovation Strategies in Downtown Bangkok. *ABAC Journal*, 42(2), 27-51.
30. Kukanja, M., Planinc, T., & Jakulin, T. J. (2020). RESTAURANT MANAGERS' PERCEPTIONS OF SERVICE QUALITY: THE MEDIATING ROLE OF RESTAURANT SIZE AND SEATING CAPACITY. *International Journal for Quality Research*, 14(1), 237.
31. Kurdi, B., Alshurideh, M., & Alnaser, A. (2020). The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning. *Management Science Letters*, 10(15), 3561-3570.
32. Lee, E. (2019). Indoor environmental quality (IEQ) of LEED-certified home: Importance-performance analysis (IPA). *Building and Environment*, 149, 571-581.
33. Lee, K. T., Kim, H. J., Jekal, J. W., Kim, J. W., & Kim, J. H. (2022). Comparative Analysis in Risk Perception of Daycare Center between

- End-Users and Construction Experts by Applying Traditional and Revised Importance-Performance Analysis. *Korean Journal of Construction Engineering and Management*, 23(1), 3-15.
34. Lee, S. M., So, W. Y., & Youn, H. S. (2021). Importance-performance analysis of health perception among Korean adolescents during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 18(3), 1280.
35. Lehtinen, U., & Lehtinen, J. R. (1991). Two approaches to service quality dimensions. *Service Industries Journal*, 11(3), 287-303.
36. León-Quismondo, J., García-Unanue, J., & Burillo, P. (2020). Service perceptions in fitness centers: IPA approach by gender and age. *International Journal of Environmental Research and Public Health*, 17(8), 2844.
37. Li, S., & Xiao, Q. (2020). Classification and improvement strategy for design features of mobile tourist guide application: A Kano-IPA approach. *Mobile Information Systems*, 2020.
38. Lisnawati, L., & Astawa, I. P. (2020). Service Quality Analysis of 'Table8' Chinese Restaurant at The Mulia, Mulia Resort And Mulia Villas. *Journal of Applied Sciences in Travel and Hospitality*, 3(1), 22-29.
39. Mandal, A., & Tsai, Y. H. (2020). TASTE OF INDIA: A CASE STUDY OF INDIAN CUISINE IN TAIWAN. *International Journal of Organizational Innovation*, 13(2).
40. Marantika, A. A. (2018). Kualitas Pelayanan Pada Perusahaan Daerah Air Minum (PDAM) Tirta Dhaha Kota Kediri Dengan Metode Service Quality Dan Importance Performance Analysis (IPA). *Jurnal Valtech*, 1(1), 176-180.
41. Martha-Martha, N. G., & PRIYONO, I. (2018). The effect of service quality on student satisfaction and student loyalty: An empirical study. *Journal of Social Studies Education Research*, 9(3), 109-131.
42. Martha-Martha, N. G., & PRIYONO, I. (2018). The effect of service quality on student satisfaction and student loyalty: An empirical study. *Journal of Social Studies Education Research*, 9(3), 109-131.
43. Martilla, J. A., & James, J. C. (1977). Importance-performance analysis. *Journal of marketing*, 41(1), 77-79.
44. McAlexander, J. H., Kaldenberg, D. O., & Koenig, H. F. (1994). Service quality measurement. *Journal of health care marketing*, 14(3).
45. Muzamil, M., Qadeer, A., Makhija, P., & Jahanzeb, A. (2018). Impact of different factors in creation of word of mouth at hospitality industry. *Journal of Hotel & Business Management*, 7(1), 1-7.

- 46.Özdemir, Ö., & Yildiz, S. M. (2020). EVALUATION OF FITNESS CENTER SERVICE QUALITY THROUGH IMPORTANCE-PERFORMANCE ANALYSIS. *European Journal of Physical Education and Sport Science*, 6(6).
- 47.Ozretić Došen, Đ., Škare, V., Čerfalvi, V., Benceković, Ž., & Komarac, T. (2020). Assessment of the quality of public hospital healthcare services by using SERVQUAL. *Acta Clinica Croatica*, 59(2.), 285-292.
- 48.Pakurár, M., Haddad, H., Nagy, J., Popp, J., & Oláh, J. (2019). The service quality dimensions that affect customer satisfaction in the Jordanian banking sector. *Sustainability*, 11(4), 1113.
- 49.Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Understanding customer expectations of service. *Sloan management review*, 32(3), 39-48.
- 50.Park, S., Chang, Y., & Park, Y. (2021). Importance-Performance Analysis (IPA) of Cyber Security Management: Focused on ECDIS User Experience. *Journal of the Korean Society of Marine Environment & Safety*, 27(3), 429-438.
- 51.Parra-Camacho, D., Añó Sanz, V., Ayora Perez, D., & González-García, R. J. (2020). Applying importance-performance analysis to residents' perceptions of large sporting events. *Sport in Society*, 23(2), 249-263.
- 52.Prentkovskis, O., Erceg, Ž., Stević, Ž., Tanackov, I., Vasiljević, M., & Gavranović, M. (2018). A new methodology for improving service quality measurement: Delphi-FUCOM-SERVQUAL model. *Symmetry*, 10(12), 757.
- 53.Purwanto, A. (2022). The Role of Digital Leadership, e-loyalty, e-service Quality and e-satisfaction of Indonesian E-commerce Online Shop. *International Journal of Social and Management Studies*, 3(5), 51-57.
- 54.Putri, H. S., Shofa, M. J., & Ramayanti, G. (2022). MEASUREMENT OF RESTAURANT SERVICE QUALITY USING MODIFICATION METHOD OF SERVICE QUALITY AND IMPORTANCE PERFORMANCE ANALYSIS. *International Journal of Multidisciplinary Research and Literature*, 1(1), 34-43.
- 55.Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon*, 5(10), e02690.
- 56.Rosalin, H., & Adhimursandi, D. (2021). INTEGRATION OF IMPORTANCE-PERFORMANCE ANALYSIS (IPA) AND KANO IN IMPROVING SERVICE QUALITY IN PDAM DISTRICT

- PENAJAM PASER UTARA. *Inovbiz: Jurnal Inovasi Bisnis*, 9(1), 41-47.
57. Saini, S., & Singh, R. (2018). Service quality assessment of utility company in Haryana using SERVQUAL model. *Asian Journal of Management*, 9(1), 702-708.
 58. Salampessy, H., Tuhelelu, A., Wahyudi, I., & Umanailo, M. C. B. (2020). Banking servqual analysis of customer satisfaction (case study at Ambon branch BRI bank in Ambon City). In *Proceedings of the International Conference on Industrial Engineering and Operations Management* (pp. 2575-82).
 59. Sattar, M. M., Qadeer, A., & Jahanzeb, A. Impact of Different Factors in Creation of Word Of Mouth at Hospitality Industry.
 60. Savić, J., & Veselinović, N. (2019). Measuring clients' attitudes about banking services quality using the SERVQUAL model. *Economic Themes*, 57(2), 201-217.
 61. Shafiq, A., Mostafiz, M. I., & Taniguchi, M. (2019). Using SERVQUAL to determine Generation Y's satisfaction towards hoteling industry in Malaysia. *Journal of Tourism Futures*.
 62. Sharifi, T., Hosseini, S. E., Mohammadpour, S., Javan-Noughabi, J., Ebrahimipour, H., & Hooshmand, E. (2021). Quality assessment of services provided by health centers in Mashhad, Iran: SERVQUAL versus HEALTHQUAL scales. *BMC health services research*, 21(1), 1-7.
 63. Singh, G., Slack, N., Sharma, S., Mudaliar, K., Narayan, S., Kaur, R., & Sharma, K. U. (2021). Antecedents involved in developing fast-food restaurant customer loyalty. *The TQM Journal*.
 64. Supardi, S., Jumawan, J., & Andrian, A. (2022). Determining Participant's Satisfaction in Mining Safety Training Using Service Quality Model and Importance-Performance Analysis. *Ekombis Sains: Jurnal Ekonomi, Keuangan dan Bisnis*, 7(1), 11-23.
 65. Susanty, M., Ningsih, T. W., & Rissa, M. F. (2019). Analysis of Customer Satisfaction with Importance Performance Analysis (IPA) Method in One of the Banking Industries. *International Journal of Innovative Science and Research Technology*, 4(7), 421-425.
 66. Susanty, M., Ningsih, T. W., & Rissa, M. F. (2019). Analysis of Customer Satisfaction with Importance Performance Analysis (IPA) Method in One of the Banking Industries. *International Journal of Innovative Science and Research Technology*, 4(7), 421-425.
 67. Tripathi, S. N., & Siddiqui, M. H. (2018). Assessing the quality of healthcare services: A SERVQUAL approach. *International Journal of Healthcare Management*.

68. Umam, R. K., & Hariastuti, N. P. (2018, September). Analisa Kepuasan Pelanggan Dengan Menggunakan Metode Customer Satisfaction Index (CSI) Dan Importance Performance Analysis (IPA). In *Prosiding Seminar Nasional Sains dan Teknologi Terapan* (pp. 339-344).
69. Yoo, J. I., Han, J. K., Youn, H. S., & Jung, J. H. (2021). Comparison of Health Awareness in South Korean Middle School Students According to Type of Online Physical Education Classes during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, 18(15), 7937.
70. Yuan, J., Deng, J., Pierskalla, C., & King, B. (2018). Urban tourism attributes and overall satisfaction: An asymmetric impact-performance analysis. *Urban Forestry & Urban Greening*, 30, 169-181.
71. Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of marketing*, 60(2), 31-46.
72. Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). Service quality delivery through web sites: a critical review of extant knowledge. *Journal of the academy of marketing science*, 30(4), 362-375.
73. Zeithaml, V. A., Parasuraman, A., Berry, L. L., & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. Simon and Schuster.