Factors affecting customers satisfaction and its impact on repurchase intention: An empirical analysis in the context of supermarket chains in Hanoi, Vietnam

Bachelor of Business Administration Thesis

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Completing a graduate thesis is the most important stage in every student's life, equipping us with research skills and knowledge - a valuable asset before we even begin our careers in the future. After 4 months of working on the project, we have completed the graduation thesis "Factors affecting customers satisfaction and its impact on repurchase intention: An empirical analysis in the context of supermarkets chains in Hanoi, Vietnam". To complete this project, in addition to the study efforts of all 5 members, it is impossible not to mention the dedicated guidance of lecturers.

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EXECUTIVE SUMMARY

Currently, on the momentum of development and global integration, customers' shopping habits are also gradually changing, along with that they have higher requirements in choosing a shopping place. In addition, to maintain the image of supermarket chains, long-term profitability and promote the repurchase intention of many customers for supermarket chains is an important task for all companies and the competition between supermarket chains. In recent years, this issue has brought up a topic of real interest to many researchers. However, there are not many researchers analyzing this topic in Vietnam, especially on the supermarket chains in Vietnam, more specifically in the Hanoi market.

The purpose of this research is to demonstrate the factors affecting customer satisfaction and its impact on repurchase intention for supermarket chains in Hanoi. This study is carried out by quantitative method through data collection and analysis of SPSS 20. On the basis of the results, we would like to make recommendations to help improve and enhance supermarket quality on customers' purchase intention for supermarket chains in the future.

The results of the study indicate 3 main factors affecting customer satisfaction and its impact on repurchase intention at supermarket chains: (1) Product quality, (2) Perceived price and (3) Service quality. The results show that there are 3 control variables: gender, income, and supermarket sizes that affect customer satisfaction and repurchase intention.

The mentioned factors have a positive relationship with satisfaction and its impact on repurchase intention. The purpose of the study was reached by analyzing 452 data in the way online survey.

Keywords: Supermarket chains, Customer Satisfaction, Repurchase Intention.

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CHAPTER 1: INTRODUCTION

1.1 Topic background

1.1.1. An overview of the retail market in Vietnam

Vietnam's retail market is considered to be entering a ripe stage and is under great pressure from integration. According to the Ministry of Industry and Trade, Vietnam currently has 240 shopping malls, 1.085 supermarkets, and nearly 2,000 convenience stores. Among them, Vietnamese retail enterprises account for about 70% to 80% of all the retailers across the country (VNDIRECT, 2020).

According to the forecast of the Ministry of Industry and Trade (MoIT), by 2025, the domestic trade is added value industry will contribute about 13.5% of GDP and for the period 2020-2025, every year, total retail sales of services and goods will rise by about 9% to 9.5%. With the assumption that the entire retail value in 2020 will be flat compared to 2019, the analysis team estimates that overall retail value will be close to $350 billion by 2025, 1.6 times higher than 2020.

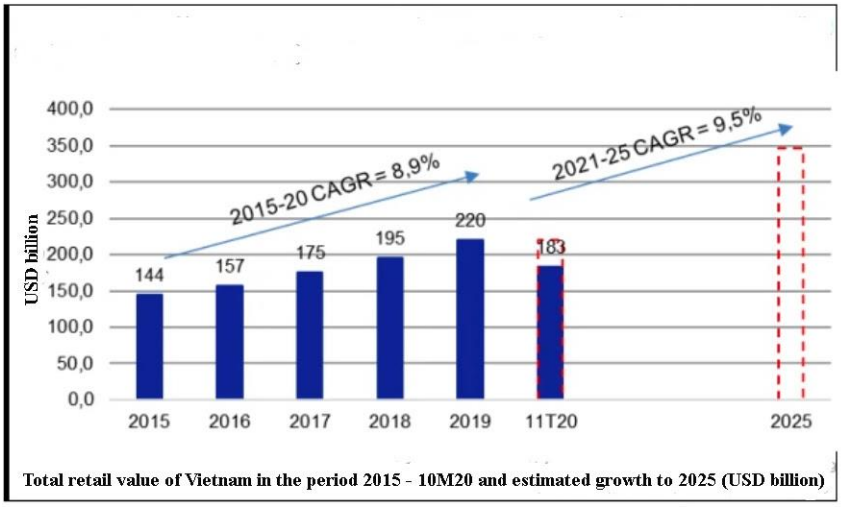

Figure 1.1: Total retail value of Vietnam in the period 2015 – 11T20 and estimated growth to 2025 (USD billion)

Despite being heavily affected by the Covid epidemic, retail sales in Vietnam continue to increase. According to data from the General Statistics Office of Vietnam, retail sales of goods, decreasing by 21.9% compared to the same period in April 2020, as a result of the effects of the social distancing period, have recovered strongly since May 2020. Total retail sales of consumer services and goods increased by 6.8% in the first 11 months of 2020 compared to the same period the previous year. Therefore, it is expected that the retail industry will have a rebound in 2021 thanks

to the recovery of consumer confidence and the spread of a vaccine for the pandemic," said analyst Phan Nhu Bach of VNDIRECT.

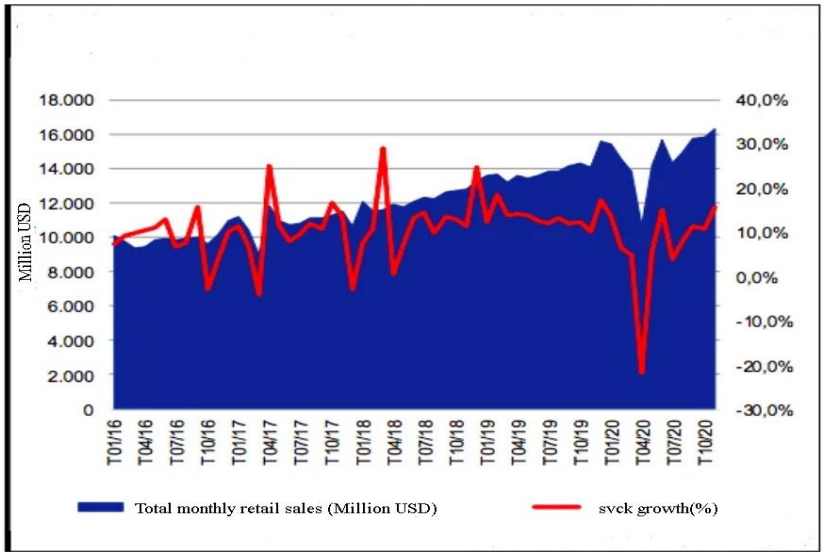

Figure 1.2: Vietnam's retail sales still maintain a growth trend after being interrupted by the social distancing period on April 20

The shopping habits of the majority of Vietnamese consumers today still follow the trend of fast and convenient while raising interest in the origin and quality of products, so it is important to understand the market, and customers' purchasing habits.

When the Covid-19 pandemic broke out, Vu Duc Nguyen, Deputy General Director of Deloitte Vietnam, who is in charge of the consumer goods industry, said that people immediately changed their priorities in consumption habits, shifting from price considerations to availability of goods, from convenience to safety, and from want to necessity. “With changing priorities, customers find products across all sales channels. Therefore, retail businesses can take advantage of this pandemic as an opportunity, turn risks into threats, and quickly expand and strengthen multi-channel sales," Nguyen said.

Vietnam is retail market consists of 3 main channels: traditional, modern, and online. The traditional model consists of a traditional market and a grocery store, which is the preferred model in rural and suburban areas. Because the rural consumer segment is often low-income, they weigh their daily budgets for food and purchases in small quantities. This is the most popular retail channel because Vietnamese people buy essential goods at these stores. Modern retail models include supermarkets, hypermarkets, and trade centers. Modern retail is gradually gaining popularity, especially in big cities such as Ho Chi Minh and Hanoi City.

1.1.2 Retail market in Hanoi

Although the COVID-19 epidemic is complicated throughout the country, the consumption of goods in Hanoi still shows signs of increasing. Recorded at some supermarkets and convenience stores such as Big C Long Bien supermarket, VinMart Royal City urban area, Aeon Long Bien …, the number of people coming to buy is stable, but there are many people who buy more goods than usual to reduce the number of times they go to the market. According to the Hanoi Department of Industry and Trade, the total consumer goods and services retail sales in November 2020 was estimated at 54.5 trillion VND, increasing by 1.9% compared to the previous month and 4.6% when compared to the same quarter the previous year. In 11 months, total consumer goods and services retail sales were estimated at 530.1 trillion dongs, 2.7% more than that of the same period last year. (VietnamFinance, 2021)

The retail market in Hanoi in recent years has continued to grow. Specifically, supermarkets - a civilized and modern retail type are developing rapidly and are becoming familiar shopping destinations for many parts of the population. According to the Hanoi Department of Industry and Trade (2019), up to the present, Hanoi has had a rapid increase of distribution facilities with 459 markets and 123 supermarkets. The city is also ready to activate nearly 2,000-point sales so that distribution units and business households in the market can sell goods to serve the residents. The Hanoi Department of Industry and Trade also approved 8,741 e-commerce websites and applications to operate. Consumer lifestyles are constantly changing, requiring retailers to invest in innovation to promptly capture emerging trends. Retailers are pushing their social media activities to attract buyers. (VietnamBiz, 2020)

1.2 Practical problems

1.2.1 General situation

From a practical perspective, the first thing is the trend of promoting multi-channel sales, including online and face-to-face. People must limit traveling and gathering to prevent the epidemic, according to the results of a consumer behavior survey conducted by the Vietnam Report, and consumers have switched their shopping channels for essential and non-essential products in the context of the Covid-19 epidemic's complicated development. The opening of these supermarkets and convenience stores is suitable for people to come in different time frames, which is convenient for the general epidemic situation of the whole country. Therefore, supermarkets and convenience

stores will be the main destination of customers during the current Covid situation. This leads to increased competition among retail chains.

The constant competition in the retail industry in Vietnam has led many retailers and service companies to focus on providing value to customers as a competitive advantage. In fact, businesses often make mistakes in their efforts to provide value to customers. This is because what businesses think is valuable to customers and what customers assume is valuable for them are not the same. Moreover, traditional retail models such as traditional markets, shops, restaurants, ... still remain quite popular. Therefore, supermarkets not only compete internally with each other but also face stiff competition against traditional retailers.

In recent years, the supermarket - trade center has gradually occupied a large proportion and is increasing in the retail market in Vietnam. Therefore, the development of the supermarket system in Vietnam has been paid attention to by the State, ministries, branches, and localities. Resolution of the IX Party Congress emphasized the development of modern and civilized commercial forms in Vietnam, Decision 311/QD-TTg dated March 20, 2003, of the Prime Minister approving the Project "Continuing to continue organizing the domestic market, focusing on developing the rural market until 2010" and the Prime Minister's Directive 13/2004/CT-TTg on the implementation of key solutions to develop the domestic market mentioned the development of a supermarket system, with priority given to development in big cities in the immediate future.

Therefore, a lot of research works, scientific and technological projects directly or indirectly related to supermarkets have been carried out, which have contributed to the development of our country's supermarket network today, such as "The Art of modern retail business" of the Institute of Commerce Research (Statistical Publishing House, 2002), the ministerial-level scientific project "Demand and training program for commercial staff in supermarkets" (The Central Commercial Officer School was implemented, 2001), Ministry-level scientific project "Civilized and modern business types, orientations for state management of supermarkets in Vietnam" (Department of domestic market policy), made by the Ministry of Trade in 2001. Thus, developing the supermarket business is one of the government's directional policies. Enhancing the competitiveness of supermarkets will promote the growth of this retail segment.

Supermarkets are the destinations of customers and are also one of the essential choices of people in their lives. In recent years, the retail industry is bringing new things and attracting consumers with product designs, varieties, and even prices. It is impossible not to mention the big domestic

and foreign supermarket chains. For necessities, before the pandemic, people chose to go to traditional markets, commercial centers, and supermarkets, and convenience stores are their less preferable choice; now they would choose online stores, convenience stores, malls, and supermarkets. However, retail supermarkets are still competing with traditional markets, because it has been a long-standing model which sticks to Vietnamese culture.

1.2.2 The situation in Hanoi

With the potential retail market of Vietnam, Hanoi - a young city, with the population estimated to reach more than 7.57 million people by 2020 (vanban.hanoi.gov.vn, 2020) - in particular, has attracted modern retail systems, especially domestic and foreign supermarket systems.

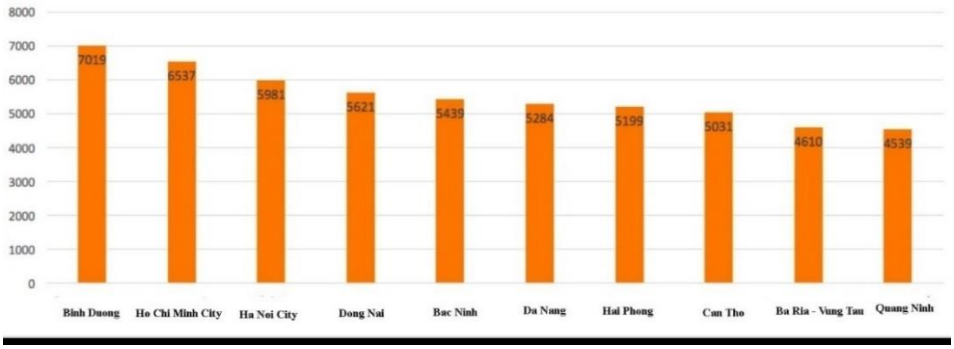

Figure 1.3: 10 Provinces/Cities with the highest monthly income per capita in 2020

Binh Duong has the highest per capita income in the country, at around 7 million VND/person per/month (Vietnambiz, 2020). With 6.5 million VND/person/month, Ho Chi Minh City is in second place. With 5.9 million VND/person/month, Hanoi is in the third position. Ha Giang, Lai Chau, Dien Bien and Son La are the provinces with the lowest per capita income, with less than 2 million VND per person/month. Despite being ranked in the top 3 of the provinces with the highest per capita income, Hanoi is a potential market and is gradually asserting its position in the national market.

Currently, Hanoi is the political center and one of the second the country's most important economic centers (after Ho Chi Minh City). This is because Hanoi has good infrastructure, convenient transportation, developed tourism, but also many commercial centers as well as a system of large supermarket chains to meet the needs of consumers. Over the years, the strong development of many types of supermarkets has contributed to the transformation of the city's appearance in the direction of civilization and modernity. Supermarket is a very specific business

because it is a mixture of products and services. Goods in supermarkets are imported from the same suppliers.

From a scientific perspective, there are many research topics on the repurchase intention of consumers, but there has not been much general research on the market in Hanoi. In Vietnam in general and Hanoi in particular, most of the research is done for a particular brand, supermarket or organization. For example, a study on “Factors affecting customer satisfaction with the service quality of CO.OP MART system in Mekong Delta” by Quang and Hien (2019). Research: “Perceived price: the main factor affecting consumer satisfaction with supermarket service quality: the case study of Big C Can Tho supermarket” by Sang (2015). Or the topic "Research on some factors affecting customer satisfaction when shopping at supermarkets in Pleiku city" (Truc, 2013). Some research topics abroad such as research “A partial least squares path model of repurchase intention of supermarket customers” (Noyan and Simsek, 2012). Or research of Chae and Seo (2011), about relationships between Perceived Quality, Customer Satisfaction, and Repurchase Intention of SSM. They focus on research, consider the relationship between perceived quality, customer satisfaction and repurchase intention, consider the influence levels, thereby having a more holistic view of the product research purpose.

Considering this fact, conducting a study on "Factors affecting customers satisfaction and its impact on repurchase intention: An empirical analysis in the context of supermarket chains in Ha Noi, Vietnam" is essential to have an overview and bring a new perspective. The study aims to measure the factors that influence repurchase intention of customers at supermarkets in Hanoi, helping the supermarkets to have a deeper awareness of the benefits and effectiveness of the product, at the same time, identifying specific factors influencing customer repurchase intentions in order to propose solutions for city supermarkets, increase the value provided to customers and become the winner in the competitive context.

Facing this situation, it is really necessary to study the factors affecting customer satisfaction and its impact on repurchase intention.

1.3 Reasons for choosing the topic

The competition between retail chains is increasing, so choosing where to shop is a difficult decision for each person. The Covid-19 pandemic with complicated dilemmas has severely affected people's daily life. Depending on each region and locality, traditional markets will not be open for sale. So, customers can choose destinations such as supermarkets or convenience stores

to buy goods. As a result, the competition between retail chains is increasing due to the prolonged epidemic. Therefore, here we choose to study the chain of general supermarkets, not the chain of specialized supermarkets.

Supermarkets not only compete internally with each other but also have to compete fiercely with traditional markets. Over the years, the supermarket chain system has continuously improved the quality. However, facing the choice between buying goods at supermarkets or traditional markets is still a rather painful problem today because each type has its own advantages and disadvantages. So how can the supermarket chain system in Hanoi thrive in the retail sector with existing resources? How to increase the number of buyers to the supermarket? How to motivate customers to continue shopping and buy more when coming to the supermarkets?

Along with the potential retail market of Vietnam, the competitiveness of supermarkets will promote the development of the retail segment. With significant contributions to economic development, the retail market in general, especially supermarket chains in particular, is holding an extremely important position in the global economy, promoting economic restructuring. economy and stimulate other economic sectors to develop. In recent years, Hanoi's retail market has developed and achieved remarkable success. It is impossible not to mention the supermarket chains that have actively contributed to the economic development of the region.

In addition, the Government is emphasizing the development of civilized and modern commercial types in Vietnam. Attracting investments for commercial and service infrastructure development has always been promoted by the city. With positive results, 83 commercial infrastructure projects calling for investment have been announced, including 58 projects in various fields markets (including wholesale markets), 17 projects in the field of shopping malls, shopping centers, 4 projects in the field of logistics infrastructure, and 4 projects in the field of petrol stations. The city has invested in new construction and construction rebuild, renovate and repair 82 market projects with a total of VND 708.98 billion. Focusing on building a network of wholesale markets to support the consumption of agricultural products for farmers, connecting the consumption of products of districts and towns in the city with large shopping centers of the city. Gradually replace plastic bags and single-use plastic products that are difficult to decompose. Up to now, about 900 establishments and businesses have signed commitments (220 markets, 130 supermarkets, 29 trade centers; 500 convenience stores, FDI retail establishments; 30 hotels and restaurants; ...) (Department of Industry and Trade, 2021).

Stemming from the above reasons, we have chosen the topic: “Factors affecting customers satisfaction and its impact on repurchase intention: An empirical analysis in the context of supermarket chains in Ha Noi, Vietnam" to do research.

1.4 Research objectives

Through this study, it will systematize theoretical and practical issues related to the factors affecting the repurchase intention of consumers at supermarkets in Hanoi.

Then, the study will evaluate the impact of factors on the repurchase intention of consumers so that solutions can be proposed to improve operational efficiency to attract customers to continue shopping at supermarkets. The study has two main goals:

Objective 1: Analysis of factors affecting customers satisfaction and its impact on repurchase intention: An empirical analysis in the context of supermarket chains in Ha Noi, Vietnam.

Objective 2: Make recommendations to help improve and enhance supermarket quality.

1.5 Research questions

The question used for finding out research objectives is as follows:

Question 1: What factors affect the customer satisfaction of consumers at supermarket chains in Hanoi, Vietnam?

Question 2: What impact of customer satisfaction on repurchase intention at supermarket chains in Ha Noi, Vietnam?

Question 3: What solutions can be implemented to increase the number of returning consumers?

1.6 Research scope

The objective of this research is to figure out what factors influence customer satisfaction and its impact on repurchase intention at supermarket chains in Hanoi. The scope of the research project is expanded in Hanoi city and focuses on the age group of 18 and older to provide the most objective and accurate data information. Characteristics of the target sample:

Survey type: Online survey

Age: In this study, our group mainly focused on young people aged 18 and over because we found that age selection has full legal responsibility, behavior, and recognition knowledge, ability to pay the costs. This age group has a high level of consumption independence, meaning they can buy consumer goods on their own. They are serious about buying and selling goods and make more mature purchasing decisions.

Research object: This topic focuses on explaining the factors affect customer satisfaction and its impact on the repurchase intention at supermarket chains in Hanoi.

Survey object: to analyze the factors that affect customer satisfaction and its impact on the repurchase intention at supermarket chains in Hanoi, the topic focuses on surveying the subjects who are consumers in Ha Noi.

Research scope: Supermarket chains in Hanoi city.

1.7 Methodology and data overview

To conduct scientific research, it is necessary to have a plan to prepare for the research process. Depending on the level of detail and each person's point of view, the research process can be divided into many different steps. In this research, we divide the research process into 5 steps. The first is to start from the found practical problems, after having found the practical problems, to determine the research objectives rescue. To achieve the research goal, we explore the theories related to the topic. From the previous theories and related studies, an overall research model was built. From that research model, we proceed to collect data, after having collected all the data, we conduct model analysis and test them.

Research method: The research is carried out by quantitative method, is done by collecting actual data through survey technique by a questionnaire sent directly to consumers in Hanoi. Data were processed by SPSS software with the main statistical techniques used such as EFA exploratory factor analysis, reliability assessment of variables by Cronbach alpha coefficient, and multivariate regression analysis.

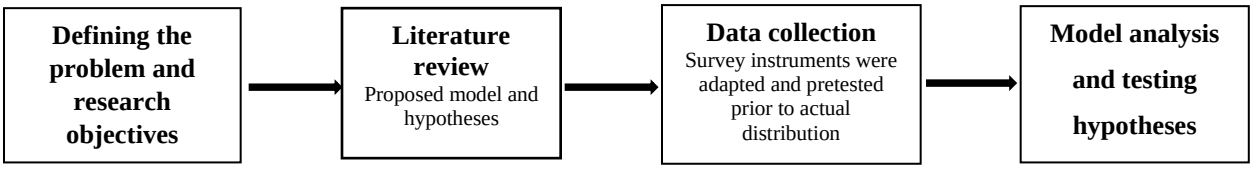

Figure 1.4: The research process

1.8 Practical significance of the topic

Through the research topic, supermarket chain managers clearly identify the factors affecting customer satisfaction and its impact on repurchase intention of consumers at supermarkets in Hanoi and the extent of each factor. From that perspective, orient strategies and policies to improve appropriate products and services in order to properly influence the factors that customers care about buying in Hanoi. In addition, the results of the study support recommendations for state

management agencies, sales policymakers, and design appropriate marketing strategies for stores to attract more returning customers, return to purchase many times, limiting the situation of customers "one gone, not return". As well as promoting the image of buying goods in Hanoi more than with other provinces.

1.9 Outline of thesis

Chapter 1: Introduction

Chapter 1 includes all the background information summarizing the research background, objectives, questions, and writing methods.

Chapter 2: Literature review

Chapter 2 presents relevant theories to formulate research questions and provides a research model with hypotheses. We are presenting and clarifying terms and definitions.

Chapter 3: Methodology

Chapter 3 presents research methods such as qualitative research or quantitative research. Then explain why the study was done that way. And data collection and analysis are also explained in this chapter.

Chapter 4: Data analysis and findings

Chapter 4 is the chapter analyzing data from the research results of chapter 3. Thereby better understanding the factors affecting customer satisfaction and its impact on repurchase intention at supermarket chains in Hanoi.

Chapter 5: Recommendation and conclusion

The final chapter provides answers to research questions and advanced advice on factors affecting customer satisfaction and its impact on repurchase intention at supermarket chains in Hanoi.

This chapter provides background information about the study. The main ideas of the study are also mentioned. The background of the problem, the context, research objectives, research questions, research scope and technical overview are all covered in this chapter. The next chapter identifies all the technical terms used in this research.

CHAPTER 2: LITERATURE REVIEW

Introduction

The literature review is the second part of the study, which is also a comprehensive summary of previous studies and is relevant to the model for this study. The thesis focuses on "Factors affecting customers satisfaction and its impact on repurchase intention: An empirical analysis in the context of supermarket chains in Ha Noi, Vietnam". Therefore, supermarket definition and supermarket type characteristics, satisfaction, repurchase intention, and measurement methods are all fully explained in this chapter.

The objective of this section is to clarify theories and models of satisfaction and repurchase intention in supermarkets. In this chapter, there are three main sections, the first being a theoretical and modeling approach that mainly focuses on model-related definitions for project reports and descriptions for the process (how it works and process efficiency). This is followed by an exploration of the conceptual framework, which systematically addresses the topic of consumer satisfaction and repurchase intention.

2.1 Overview of supermarket

2.1.1 Supermarket concept

According to Philip Kotler (2006), supermarkets are "relatively large self-service stores with low costs, large sales of goods, and low-profit margins, ensuring the customer satisfaction needs. In terms of food, laundry detergents, cleaning agents and home care products". According to the Dictionary of Market Economy, "A supermarket is a self-service store that sells a variety of items, meeting the daily consumption needs of consumers, such as food, beverages, household appliances, and other items other necessary goods".

Currently, depending on the country, the supermarket is defined in a variety of ways. The US considers supermarkets to be relatively large self-service stores with low costs, low-profit margins, large sales volumes, ensuring to fully satisfy consumers' needs for food, cleaning agents, and home care products. According to French economist Marc Benoun (1994), supermarket is a "self-service retail store with an area of from 400m^2 to 2500m^2 mainly selling food".

In Vietnam, the definition of a supermarket is provided in the Regulation on Supermarkets and Trade Centers issued by the Ministry of Industry and Trade of Vietnam on September 24 (2004). According to this document, "supermarket is a type of store row modern goods; general or specialized business, with a rich and quality assurance, diversified product structure; meet the

standards of the business area; has a civilized and convenient service method to satisfy the customers' shopping needs. In short, a supermarket can be simply understood as a type of large-scale retail store that operates under.

According to Kotler (1990), chain stores or chain supermarkets are a group of two or more stores that are all owned and operated by the same company, have centralized buying and merchandising, and sell comparable products. Compared to independent supermarket chains have the most advantages. Because of their scale, they can buy in huge numbers at reduced prices. They can afford to hire corporate-level experts to handle pricing, merchandising, promotion, sales forecasting, and inventory control, for example. Because their advertising costs are distributed across numerous outlets and a huge sales volume, chains benefit from promotional economies as well.

2.1.2 Supermarket classification

According to the definition in the "Regulation of Supermarkets and Trade Centers" of the Ministry of Trade of Vietnam (2004), supermarkets have two main business forms: general business or specialized business. A general supermarket is a place that provides a large and diverse range of goods, of which usually at least 70% of goods are food, foodstuffs, and other frequently consumed goods. Self-service method, trading a variety of popular daily consumer goods. Specialized supermarkets focus on trading goods to serve certain needs of consumers such as electrical goods, electronics, household appliances, phones, computers, stationery, food.

In addition, the development of the economy has promoted the emergence of a new type of supermarket called convenience supermarket. This is a type of supermarket with a small scale in terms of area and quantity of goods, usually located near residential areas, mainly dealing in daily-life items and usually serving customers from morning to night.

Standard		**Business area (m2)**	**List of business goods (number of goods names)**
Type I supermarket	General supermarket	>5000	>20.000
	Specialized supermarket	>1000	>2.000
Type II supermarket	General supermarket	>2000	>10.000
	Specialized supermarket	>500	>1.000
Type III supermarket	General supermarket	>500	>4.000
	Specialized supermarket	>250	>500

Table 1: Classification of supermarkets according to Vietnamese law

In addition, the Regulation on Supermarkets and Trade Centers also stipulates the requirements of each type of supermarket above.

Firstly, a supermarket is a solidly built construction with high aesthetics, advanced and modern design, technical equipment to meet the requirements of fire prevention, fire-fighting, security is safe, environmental sanitation, and convenient for all types of customers; there are parking spaces and toilets for customers in accordance with the business scale of the supermarket.

Secondly, supermarkets must ensure that the warehouse system, technical equipment for preservation, packaging, preliminary processing, payment, sales, and business management are advanced and modern.

Thirdly, the goods in the supermarket are organized, arranged according to categories and groups of goods in a civilized and scientific way to serve customers to choose, shop, and pay conveniently and quickly; have a place to store personal luggage; there are catering services, entertainment, serving the disabled, serving children, home delivery, selling online, by post, by phone.

2.1.3 Features of supermarkets

Based on the reference to the analysis of the Vietnam Trade study and the domestic studies, the supermarket has the following characteristics:

Firstly, a supermarket is a type of retail store invested and organized in the form of large-scale stores, equipped with modern facilities, managed by businessmen, and licensed to operate. Supermarkets perform the retail function, which entails selling items directly to consumers and is considered a highly developed distribution channel.

Secondly, supermarkets are invested with large capital and built on a large area. In addition, the expansion of chain supermarkets in many different locations makes the scale of supermarket systems increasingly large.

Third, supermarkets apply self-service sales and this is considered an advanced and modern feature of supermarkets compared to other forms of retail stores.

Fourth, the art and modernity in the arrangement and display of goods make the difference of the supermarket. Supermarkets always make the most of every space to display goods while still creating a comfortable and spacious feeling for customers to shop. In addition, the art of displaying goods is also reflected in the reasonable arrangement and sequence.

Fifth, supermarkets provide a variety of goods that consumers want to look for in order to serve daily life. The list of goods is extremely diverse and clearly listed. The items are very diverse in terms of types, manufacturers, and origins to help consumers feel comfortable in choosing.

Sixth, modern facilities and means of payment are always fully equipped at all supermarkets, thereby creating convenience in shopping for consumers. In addition, payment activities at supermarkets are also very convenient with various forms from cash, bank cards, credit cards, etc... to help shoppers have more choices.

Seventh, supermarkets carry out business activities with a large number of products, serving a variety of customers, so the revenue achieved is always high and brings a large source of profit.

2.2 Customer satisfaction

2.2.1 Concept and classification of customers

In today's market economy, customers are considered as one of the most crucial factors for the company's success. It is no coincidence that there is a saying "Customer is king". In "The Practice of Management", published in 1954, Peter Drucker showed that "the only valid definition of business purpose is to create customers". Customer is understood in the sense of the English word "customer" in the Oxford Advanced Learner's Dictionary as "an individual or organization that purchases goods from a certain store or establishment".

L.L.Bean Company (founded in 1912 by Leon Leonwood Bean), a company specializing outdoor equipment and in high-quality apparel, believes that: "Customers are the most important subject to our customers and our business. They are not dependent on us but we depend on them. They are not outsiders but the purpose of our business. When serving our customers, no not we are helping them but they are also assisting us by providing us with the opportunity to serve. We never argue with customers because the customer always wins what they want and our job is to make a profit for both."

Based on many factors, customers can be classified into “current customers” and “potential customers” or “external customers” and “internal customers”. According to Needham and Dransfield (1999), a company's internal customers are its employees, or the employees will become customers for each other. This customer element pushes organizations to put fair procedures in place to encourage employee loyalty and assist employees in maintaining close coworker relationships. Meanwhile, external customers, in the traditional sense, are the people who buy and use the goods and services of the business. It is the activity of serving these customers that will directly generate the main profit for the business.

In this topic, customers are mainly considered in terms of “current” and “potential”. Existing customers are regular customers who have a relationship of buying and selling goods and using

services of enterprises. Meanwhile, potential customers are the customers that the business is capable of serving and they will come to the business.

2.2.2 Customer satisfaction

Customer satisfaction is defined in a variety of ways, and there is much debate regarding what constitutes customer satisfaction. Customer satisfaction is defined as the difference between a client's expectations and their actual perception, according to studies. According to Bachelet (1995), a customer's emotional response to a product or service based on personal experience is known as customer satisfaction. “Satisfaction is the complete responsibility of the consumer. It is a rating given to features of a product or service, or of the product or service itself that provides (or is offered) consumer preference”. (Oliver, 1997)

According to Zeithaml and Bitner (2000), a variety of factors influence customer satisfaction, including product quality, service quality, price, situational considerations, and personal characteristics. Meanwhile, according to Kotler and Keller (2006, p.144), define "satisfaction as a person’s feeling of pleasure or disappointment which resulted from comparing a product’s perceived performance or outcome against his/her expectations".

According to Hansemark and Albinson (2004), “satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some needs, goals or desire”.

As a result, satisfaction is divided into three levels. The lowest level is dissatisfaction, which occurs when the customer's perception is lower than expected. The second level is that the consumer will be satisfied if their perception is equal to the expectation. When customers' perception exceeds their expectations, they experience the maximum level of satisfaction.

Customer expectations are shaped by previous purchasing experiences, recommendations from friends and colleagues, and information from vendors and competitors. Businesses must invest more, or at the very least invest in more marketing campaigns, to boost customer happiness. Customer satisfaction refers to customers' subjective judgments or assessments of a service or product based on their knowledge of it. It's a type of psychological reaction that occurs when a customer's requirement is met.

Customer satisfaction is shaped by experiences, particularly those gained when purchasing and using goods and services. Customers will make a comparison between reality and expectations after acquiring and utilizing the product, thereby evaluating whether they are satisfied or not.

In short, customers generate revenue and profits for the company, hence the operating credo of those businesses is to satisfy their requirements. Customers who are happy with a company's products or services are more inclined to repurchase intention. Furthermore, delighted customers are more likely to recommend the company's services to other customers. Customer satisfaction with a service refers to how a customer feels about a firm after each contact or transaction. (Bitner and Hubbert, 1994)

2.3 Repurchase intention

Repurchase intention refers to a person's intention to obtain a specific service provided by the same organization, taking into account the potential conditions and current situation. One of the most crucial elements influencing a company's profitability is customer repurchase intent. The enormous development in the number of supermarkets in Vietnam has created a significant competitive environment in terms of pricing benefits, product quality, and service. Managers run intense marketing campaigns in order to attract people to their supermarkets, and they hope that these campaigns will be effective in bringing customers to their stores.

Repurchase intention is a term taken from the theory of planned behavior and is described as a future behavior that is intended or expected (Fishbein and Ajzen, 1975; Swan, 1981). It has evolved into a significant metric and tool for analyzing and forecasting social behavior (Ajzen, 1991; Fishbein and Manfredo, 1992). Baloglu (2000), states that planned conduct is always accompanied by observable action and that after intentions are created, behavior is then expressed (Kuhl and Bechmann, 1985).

Repurchase intention represents the predictive ability of customers regarding repurchase behavior (Seiders et al., 2005). According to Blackwell et al. (2001), illustrate a particular type of purchase intention, namely repurchase intention, which looks at whether we intend to buy the same product or brand again. "Repurchase intention can be defined as the individual’s judgment about buying again a designated service from the same company, taking into account his or her current situation and likely circumstances" (Lacey & Morgan, 2007). According to Chiu et al. (2009), “explained repurchase intention as the possibility that customers are willing to purchase a product from the same seller”.

2.4 Literature gaps

Currently, there are many research articles on satisfaction. However, to the best of our knowledge, the topic related to customer satisfaction and its impact on the repurchase intention of consumers

is less studied in the Vietnamese market, and there is very little proven and collected data in supermarket chains in the north of Vietnam. In Vietnam, studies mainly focus on the southern market and specific supermarkets, so this study is still limited. Because different cultures lead to different buying behavior, so cultural factors have an impact on customers' buying behavior in general, further studies are needed in Vietnam, especially in the North.

Studies on satisfaction and repurchase intention at supermarket chains have been done very little in developing countries, especially in Vietnam. Therefore, more in-depth research is needed to understand this market in order to improve the competitiveness among retail chains in the regions. Therefore, the study "Factors affecting customers satisfaction and its impact on repurchase intention: An empirical analysis in the context of supermarket chains in Ha Noi, Vietnam" refers to methods and models from other studies to clarify theories and concepts.

In previous studies in Vietnam and abroad, there are very few studies using control variable analysis. Meanwhile, the control variables show that consumer behavior is not the same among customer groups. So, if we don't mention the control variable, it's a gap in the literature review.

2.5 The research domestic and foreign models

2.5.1 The research foreign models

The research of Noyan and Simsek (2012), discovered a model of customers' repurchase intention including 8 Customer satisfaction (SAT), Comparative Price Perceptions (CPP), Discount Perceptions (DISP), Product Quality Perceptions (PQP) and Service Quality Perceptions (SERQ), Value Perceptions (VALUE), and TRUST, Repurchase Intention (REPIN) factors. The results of this study show that SAT is the most important factor influencing the repurchase intention, after that by other equally influential factors such as VALUE, PQP, and CPP.

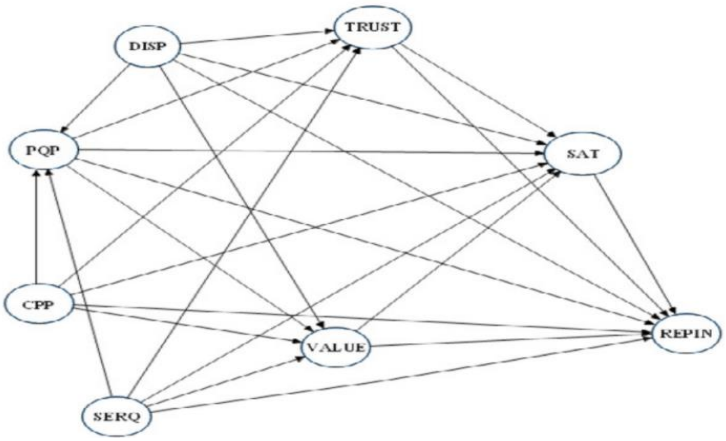

Figure 2.1: Proposed model of Noyan and Simsek (2012)

Research of Chae and Seo (2011), this research aims to show the relationship between perceived quality, satisfaction, and repurchase intention of customers at hypermarkets in the retail market in Korea. The results of this study show that perceived quality has a positive influence on satisfaction, and customer satisfaction is positively related to repurchase intention. Besides, there are 3 control variables, age, house income, and the size of family, affecting customer satisfaction and repurchase intention. However, there are some limitations that in data collection, they only collected 165 surveys qualified for analysis, so the reliability is limited. Partly due to the security of businesses and companies, data collection is very difficult.

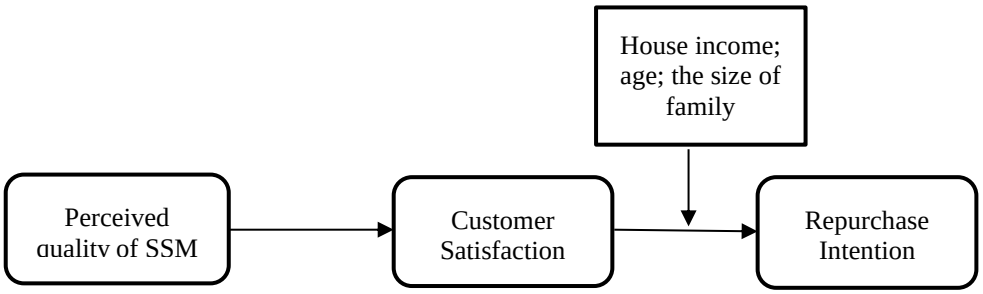

Figure 2.2: Proposed model for research of Chae and Seo (2011)

2.5.2 The research domestic models

In Vietnam, there are many studies show that the factors affecting customer satisfaction and its impact on customers' intention to return to purchase depend a lot on the constitutive factors. There is the research conducted by Quang and Hien (2019), there are 6 factors affecting customer satisfaction. The multivariate regression analysis has identified the factors that affect customer satisfaction as 4 factors: Suitable Price, Physical aspects, Product Quality, and Safety. Through hypothesis testing of the model, it has been confirmed that the above 4 factors all have an influence on customer satisfaction. However, the scope of the study is limited because the study was conducted at only 4 supermarkets belonging to the CO.Op mart system in the Mekong Delta.

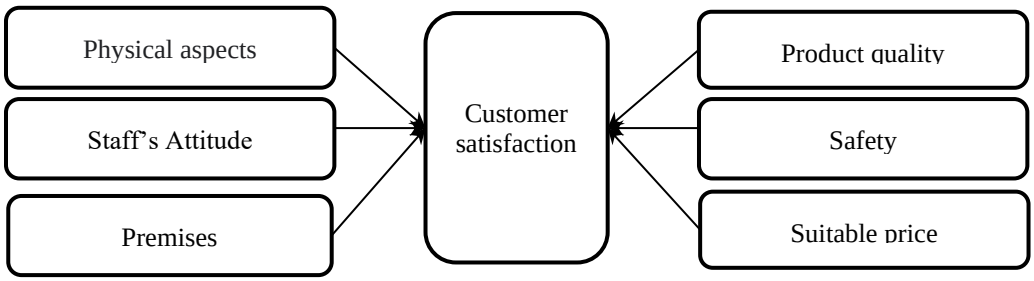

Figure 2.3: Proposed model for research satisfaction of Quang and Hien (2019)

Research by Sang (2015), uses a model of 7 factors affecting consumer satisfaction. After studying the factors affecting consumer satisfaction with supermarket service quality: in the case study at Big C Can Tho, there are 5 influencing factors: Product, Perceived price, Physical aspects, Premises, and Secure. However, the scope of the research is limited because it was conducted at only supermarkets belonging to the Big C system in Can Tho.

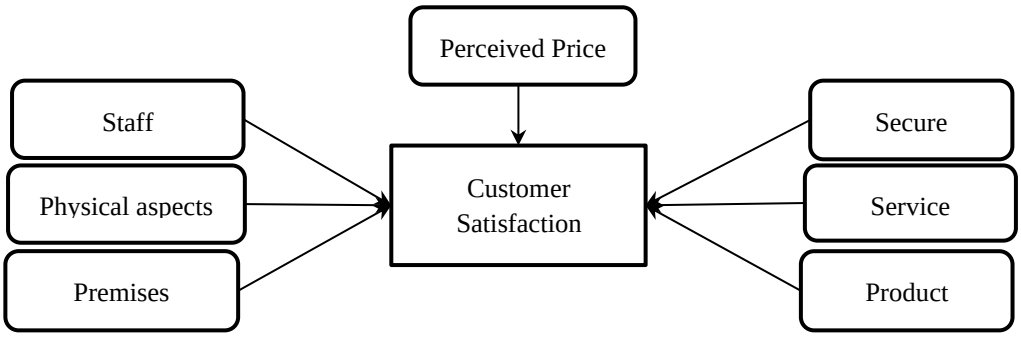

Figure 2.4: The SEM model measures the level satisfaction of Sang (2015)

Next is the study of Truc (2013), the proposed research model includes six factors which are: Product quality, Staff service, Infrastructure, Promotion, Support Services, Price. The observed variables were included in the regression analysis after verifying the scale's reliability and examining the factors. Customer satisfaction at Pleiku supermarkets is influenced by three elements, according to the results of multivariate regression analysis: promotion, staff service, and product quality. When it comes to customer satisfaction, the aspect "Product quality" is the most significant. Next is the service of the staff, and finally the element of “Promotion”. The model's hypotheses testing revealed that the three criteria above all had a positive impact on customer satisfaction. This study, like other research, has some limitations. To begin with, this research was limited to customers who currently reside in Pleiku. While the audience to shop at supermarkets in Pleiku city includes all people in the whole province, especially in neighboring provinces. They also regularly arrange to go to the supermarket periodically every week, every month. Secondly, in this study, the research subjects are mostly young customers, mainly students, so the representativeness is still limited.

Figure 2.5: Proposed model of Truc (2013)

2.6 Proposed research model and hypothesis development

Based on the research of Quang and Hien (2019), through the hypothesis testing of the model, 4 factors have been confirmed: Price, Physical aspects, Product Quality, and Secure impact on customer satisfaction. Similarly, in the study by Sang (2015), Perceived Price, Product, Physical aspects, Premises, and security had an effect on the model, they affect shopping satisfaction and contribute to deciding the competitiveness of customers supermarket with the market, retail store system with other supermarkets. Next is a study by Truc (2013), the results show that: Promotion, Staff Service, and Product Quality all have a positive impact on customer satisfaction.

In addition, the study of Noyan and Simsek (2012), discovered a pattern of repurchase intention of supermarket customers. According to the results of this research, Customer satisfaction (SAT) is the most important factor affecting the intention to return to purchase, followed by factors with equal impact such as VALUE, PQP, and CPP.

Besides, research of Chae and Seo (2011), it is shown that perceived quality has a positive influence on customer satisfaction, and customer satisfaction is positively related to repurchase intention.

From the review of customer satisfaction models as well as the research done in the Vietnamese retail market. Based on the results of the above studies, our team uses the following factors: Product Quality, Perceived price, Promotion, Personal interaction, and Physical aspects all of which are variables that have an impact on consumer satisfaction and satisfaction affect positive repurchase intention as variables in the model proposed in this study.

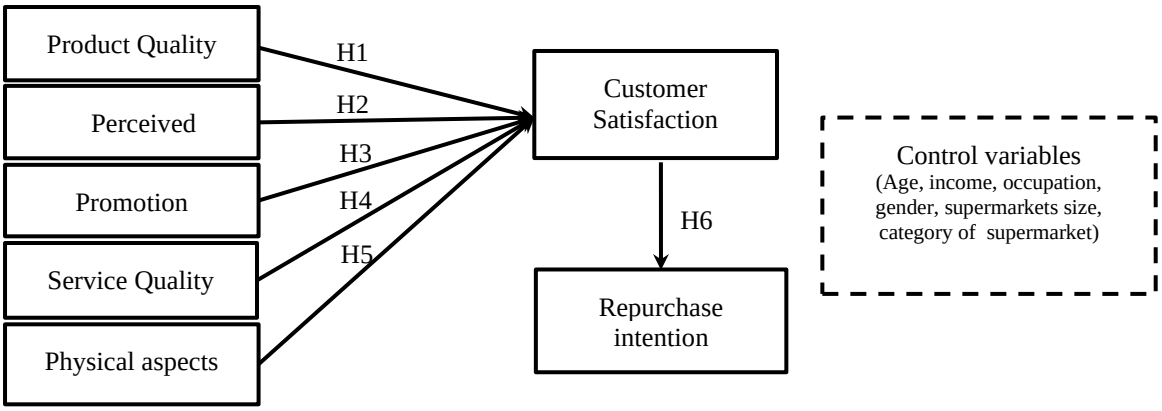

Figure 2.6: Proposed research model

2.6.1 Product quality

The quality of the products and services supplied in the stores is a key aspect in determining consumer happiness. Quality refers to a product's ability to meet a customer's specific needs. Perceived quality refers to a consumer's assessment of products or brands that match their needs. Individuals' experiences with two firms' brands' items are used to make such assessments. Product quality, according to Chowdhury and Adaleen (2007), improves competitive advantage. When comparing national and private brands, customers prefer national brands because they are more well-known, reputable, and have more media coverage (Besharat, 2010; Chen et al., 2007). Product quality is often determined by factors such as product characteristics, advantages, and the ability to meet specific needs, among others. It's regarded to be one of the most influential factors in customer purchase intent (Gilmore, 1974). In addition, based on the research of Truc (2013), through the hypothesis testing of the model, Product quality is a factor in most customer satisfaction. As a result, it is possible to hypothesize that:

H1: Product quality has a positive effect on customer satisfaction at supermarket chains.

2.6.2 Perceived Price

For perceived price, Lichtenstein et al. (1993) identified seven linked constructs. Price was recognized as having a "negative role" in five categories and a "positive role" in two others. Price memory, price search, generic product purchase, sales response, and redemption of coupons were all utilized to predict buying attitudes. Consumers' purchase behavior is influenced by characteristics such as coupon proneness, price consciousness, sales consciousness, and value consciousness.

Consumers perceive objective price-quality correlations with some precision, according to Lichtenstein and Burton (1989). Non-durable products had more accurate price-quality

perceptions, and price-quality perceptions are influenced by product category. Consumers utilize product type schemas to evaluate price-quality correlations (a higher price reflects a higher standard of quality). Pricing as a quality indication has an impact on product selection, as does faith in pricing as a quality indicator. Items with a high price tag project a high-status image (Lambert, 1972). According to certain studies, product quality evaluations were influenced by price and store image (Stafford and Enis, 1969).

Customers' perceptions of price are influenced by internal suggestion prices (Thaler, 1985). This is based on prior experiences that serve as a reference point for current stimuli (Kalyanaram and Winer, 1995; Janiszewski and Lichtenstein, 1999). According to Lichtenstein et al. (1991), connotative semantic signals strong uniqueness contributes to good consumer responses for big discounts. When the offer price is high, semantic cues based on distinctiveness elicit favorable high price-related responses.

Consumer price sensitivity is attributed by Nagle and Holden (1995) to perceptions of replacement availability, product value, switching costs, incapacity to make comparisons, benefits, related expenditure, fairness, quality, inventory effects and shared costs. Price sensitivity and readiness to pay should be understood, Danes and Lindsey-Mullikin (2012) employed Nagel and Holden's paradigm. Price sensitivity was influenced by the availability of substitutes, fairness, quality and distinctive value. According to Raghubir and Corfman (1999), promotion-related pricing perceptions are moderated by consistency with previous promotions, consumer expertise, and distinctiveness. Because price and promotions have an impact on brand evaluations, to the consumer, they should appear to be consistent.

Consumers' openness to profitable offers and discounts is included into price assessments. Deal proneness is defined by Lichtenstein et al. (1990) as a psychological concept that influences customers' coupon receptivity and value-conscious behavior. The coupon is a promotional code that allows you to get a discount on a product. Deal-prone behavior and value-conscious can be distinguished based on acquisition and transaction utilities. The value a consumer obtains from the purchase of a product as a result of discounts or refunds is referred to as acquisition utility. It refers to the cost of a product in relation to its perceived utility. The psychological enjoyment that a customer obtains from a product purchase is referred to as transaction utility. Acquisition utility is vital to value-conscious consumers, whereas transaction utility is important to coupon-prone consumers when purchasing a product.

Several surveys of consumer satisfaction have been undertaken. Voss et al. (1998) discovered that pricing perceptions do affect satisfaction in an experiment involving a hotel check-in scenario. Fornell et al. (1996), discovered that price perceptions affect consumer satisfaction in a macroeconomic study covering seven industrial sectors. In situations characterized by such performance uncertainty, price perceptions are expected to have a greater impact on both satisfaction and repurchase intention (Jarvenpaa and Todd, 1997; Liu and Arnett, 2000). As a result, customers are forced to rely on price signals to make decisions. In such cases, price fairness may be the most crucial aspect in deciding satisfaction and, as a result, the likelihood of returning. A comparison measure of pricing perceptions vs competition is used to examine the effect of price perceptions on customer satisfaction. In the sense that prices charged by competitors set the normative standard is established, this measure of competitive pricing perceptions is a specific example of Bolton and Lemon's (1999), the measure of price disconfirmation metric (deviation from normative payment standards). Besides, in the study by Sang (2015), Perceived price is a factor in most customer satisfaction. According to Tham (2019), it is also shown that perceived price has an impact on customer satisfaction. The following relationship is hypothesized as a result of the relevance of pricing perception customers as a driver of overall customer satisfaction:

H2: Perceived Price has a positive effect on customer satisfaction at supermarket chains.

2.6.3 Promotion

The process of enhancing customer knowledge of a product or brand, generating sales, and developing brand loyalty is referred to as "promotion." It's one of the four main elements of the marketing mix, which also includes the four Ps: pricing, product, promotion, and place. “Promotion is sometimes referred to as one of the five components of the promotional mix or plan” (Harris, 2010). These tactics include personal selling, sales promotion, direct marketing, advertising, and publicity. A promotional mix specifies how much weight each of the five components should be given, as well as how much money should be spent on them. Sales increases, brand equity, new product adoption, competitive retribution, positioning, or the creation of a company image are all instances of a promotion's purpose and, as a result, its promotional plan. According to Gulhayat and Fatma (2011), promotions are intended to boost sales in the short term. Money-off coupons, discount codes, and "flash deals" are all examples of sales promotions.

Fatma and Gulhayat (2011) define promotion as "a type of corporate communication that uses multiple means to reach a specified audience with a specific message in order to achieve specific

organizational objectives". Almost all businesses, whether for profit or non-profit, across all industries, must attend to some form of promotion. Multinational corporations may spend significant sums to secure high-profile celebrities to serve as corporate spokespersons, while a one-person business owner might hand out business cards at a local businessperson's gathering. An effective promotional plan, like other marketing decisions, necessitates a thorough understanding of how promotion interacts with other aspects of the marketing jigsaw (e.g., product, pricing, distribution, target markets). As a result, decisions about promotions should be made with an understanding of how they will affect other parts of the company. For example, running a huge advertising campaign for a new product without first guaranteeing that there is sufficient inventory to meet any demand produced by the advertising would not be well accepted by the production department (not to mention other key company executives). As a result, marketers should avoid making promotional decisions on their own. Rather, participation from people in the impacted functional areas is required for the overall effectiveness of a promotional plan. The results of a study conducted by Truc (2013) suggest that promotions have a favorable impact on consumer satisfaction. Hence the hypothetical model:

H3: Promotion has a positive effect on customer satisfaction at supermarket chains.

2.6.4 Service Quality

In the research literature, service quality is a concept that generates a lot of attention and debate since researchers have a hard time defining and measuring it without reaching a consensus. (Wisniewski, 2001)

Depending on the research object and the research context, service quality is defined in a variety of ways. “Service quality is the extent to which a service meets the needs and expectations of customers” (Asubonteng et al., 1996; Lewis and Mitchell, 1990; Wisniewski and Donnelly, 1996). According to Edvardsson, Thomsson and Ovietseit (1994), said that "service quality is a service that meets customers' expectations and satisfies their needs".

According to ISO 8402 (1999), service quality can be considered as “the set of characteristics of an object, which give that object the ability to satisfy stated or implied requirements”. Customer satisfaction may alternatively be defined as the difference between the expected (A) and the achieved (B) quality of service (B). If the expected quality (A) exceeds the quality attained (B), the quality is exceptional; if the expected quality exceeds the quality achieved, the quality is not guaranteed; and if the expected quality equals the quality achieved, the quality is guaranteed.

Service quality, according to Parasuraman et al. (1985, 1988), is the difference between consumer expectations and their assessment of the service when they use it. Service quality can be defined as "the customer's assessment of the overall outstanding excellence of the service" (Zeithaml, 1988) or "the overall impression of consumers of the relative inferiority of the organization and its services" due to the intangible, heterogeneous, and inseparable characteristics of services (Bitner and Hubbert, 1994). According to Quang and Hien's (2019) research, the aspect of service quality has been proven as having an impact on customer satisfaction through hypothesis testing of the model. Similarly, according to the findings of Truc (2013), service quality has a favorable impact on customer satisfaction. As a result, here's a hypothetical model:

H4: Service quality has a positive effect on customer satisfaction at supermarket chains.

2.6.5 Physical aspects

The physical appeal of a store has stronger correlates with customers' patronage decisions, according to Baker et al. (1994) and Darden et al. (1983). Customers who are able to shop with ease and comfort will leave the store feeling satisfied.

Physical aspects include the aesthetics of the physical facilities as well as the convenience that the layout of the physical facilities provides to the consumer. It also implies that customers respect the convenience of purchasing provided by physical aspects such as store layout. Customers value the convenience of purchasing those physical aspects, such as store layout, provide, according to retail literature (Gutman and Alden 1985; Hummel and Savitt 1988; Mazursky and Jacoby 1985; Oliver 1981). According to Quang and Hien (2019), and Sang (2015), physical aspects are related to the way the shelves are arranged in the supermarket, that is, it makes it easy for customers to access these shelves. This means that these shelves bring convenience and appearance to customers. Therefore, the hypothesis:

H5: Physical aspects have a positive effect on customer satisfaction at supermarket chains.

2.6.6 Impact of customers satisfaction on repurchase intention

From the study of Chae and Seo (2011), it is shown that perceived quality has a positive influence on customer satisfaction and customer satisfaction is positively related to repurchase intention. According to Ibsan, E., et. al. (2016), there is a positive relationship between customer satisfaction and repurchase intention affecting their repurchase intention (L.E. Plessis, 2010). Customer satisfaction has an important effect to increase the repurchase intention (Santoso and Aprianingsih, 2017).

A wide range of product and service research suggests a direct positive association between customer satisfaction and repurchase intention (Anderson and Sullivan, 1993; Bolton, 1998; Cronin and Taylor, 1992; Fornell, 1992; Oliver, 1980; Patterson and Spreng, 1997; Rust and Zahorik, 1993; Selnes, 1998; Swan and Trawick, 1981; Taylor and Baker, 1994; Woodside et al., 1989). Overall consumer satisfaction with a service is highly linked to the behavioral repurchase intention of the same service provider, according to these researchers. However, it's important to remember that assuming a direct positive relationship between satisfaction and repurchase intent is oversimplifying the matter.

According to Kotler (2010), emphasized that customer satisfaction would prompt customer amenability to repurchase, indeed overlooking announcements of contending brands and not buying products from other companies; this demonstrates the relationship between customer satisfaction and repurchase intention. A direct positive relationship between customer satisfaction and repurchase intention is supported by a wide variety of product and service studies (Zhang et al., 2011; Rose et al., 2012). These studies establish that overall customer satisfaction with a service is explosively associated with the behavioral intention to return to the same service provider. These studies determined that the overall customer satisfaction with a service is nearly related to the intention to return to the same service provider. This leads to the hypothesis:

H6: Customer satisfaction has a positive impact on customers' repurchase intention at supermarket chains.

2.6.7 Control variables

The theory of consumer behavior by Kotler and Keller (2012) has determined that consumer behavior is influenced by individual trait variables. These individual trait variables were not the core of this study. However, to ensure that the inclusion of the independent variables in the model is meaningful, it is necessary to control for the influence of these individual characteristic variables. Therefore, we have hypotheses from H7.1 to H7.12 as follows:

H7.1: There is a difference in customer satisfaction of consumers by gender.

H7.2: There is a difference in the repurchase intention of consumers by gender.

H7.3: There is a difference in customer satisfaction when buying at category of supermarket.

H7.4: There is a difference in the repurchase intention when buying at category of supermarket.

H7.5: There is a difference in customer satisfaction when shopping at supermarkets of different sizes.

H7.6: There is a difference in the repurchase intention when shopping at supermarkets of different sizes.

H7.7: There is a difference in customer satisfaction when shopping at supermarkets of different age groups.

H7.8: There is a difference in the repurchase intention when shopping at supermarkets of different age groups.

H7.9: There is a difference in the satisfaction level of customers with different incomes between the income groups.

H7.10: There is a difference in the repurchase intention level of customers with different incomes between the income groups.

H7.11: There is a difference in the satisfaction levels of customers with different occupational groups.

H7.12: There is a difference in the repurchase intention level of customers with different occupational groups.

2.7 Conclusion

This chapter details the theories related to consumer satisfaction and repurchase intention at supermarkets. Concepts are introduced about satisfaction, repurchase intention, factors influencing the topic. Furthermore, this chapter also presents models of consumers' satisfaction and repurchase intention at supermarkets with factors according to the conceptual model and model that we have built. Based on previous studies related to this issue, the presented research model includes the following elements: Product quality, Perceived price, Promotion, Service quality, Physical aspects, and control variables. The hypotheses are subject to the following factors:

H1: Product quality has a positive effect on customer satisfaction at supermarket chains.

H2: Perceived Price has a positive effect on customer satisfaction at supermarket chains.

H3: Promotion has a positive effect on customer satisfaction at supermarket chains.

H4: Service quality has a positive effect on customer satisfaction at supermarket chains.

H5: Physical aspects have a positive effect on customer satisfaction at supermarket chains.

H6: Customer satisfaction has a positive impact on customers' repurchase intention at supermarket chains.

H7.1: There is a difference in customer satisfaction of consumers by gender.

H7.2: There is a difference in customer satisfaction when buying at category of supermarket.

H7.3: There is a difference in customer satisfaction when shopping at supermarkets of different sizes.

H7.4: There is a difference in customer satisfaction when shopping at supermarkets of different age groups.

H7.5: There is a difference in the satisfaction level of customers with different incomes between the income groups.

H7.6: There is a difference in the satisfaction levels of customers with different occupational groups.

H7.7: There is a difference in the repurchase intention of consumers by gender.

H7.8: There is a difference in the repurchase intention when buying at category of supermarket.

H7.9: There is a difference in the repurchase intention when shopping at supermarkets of different sizes.

H7.10: There is a difference in the repurchase intention when shopping at supermarkets of different age groups.

H7.11: There is a difference in the repurchase intention level of customers with different incomes between the income groups.

H7.12: There is a difference in the repurchase intention level of customers with different occupational groups.

CHAPTER 3: METHODOLOGY

Introduction

This chapter explains the research methodologies employed, the reasoning behind the selection, and how the research was conducted. This chapter is divided into six sections: introduction includes research philosophy, research approaches, research methods, research progress; data collection methods include Secondary data, Primary data, Measurement scale, and questionnaire design, Sampling techniques; data analysis methods include: reliability test, frequency analysis, correlation analysis, regression; ethical considerations, limitation, and conclusion. Each approach was chosen to best fit this research based on its individual qualities.

3.1Research philosophy

Research philosophy could be a collection of views about the way to gather, process, and apply evidence regarding a phenomenon. The term epistemology (what is known to be true) incorporates the many philosophies of the research approach, as opposition doxology (what is believed to be true). the method of adjusting things believed into things known is that the objective of science: Doxa to epistemology. within the Western tradition of science, there are two major research philosophies: positivist (also called scientific) and interpretative (sometimes known as anti-positivist) (Galliers, 1991).

Positivism

Positivists believe that reality is stable and that it can be seen and described objectively (Levin, 1988), that is, without interfering with the phenomena being studied. They think that events should be separated from one another and that observations should be repeatable. This typically includes modifying reality with only one variable in order to detect regularities in and develop connections between a wide range of the social world's constituent pieces. Predictions are made based on previously observed and described realities, as well as their interrelationships. Positivism has a long and distinguished history. Knowledge assertions that do not support positivist philosophy are simply dismissed as scientific and hence invalid in our culture" (Hirscheim, 1985, p.33). Alavi and Carlson (1992) determined that each empirical investigation in a sample of 902 IS research publications was positivist in nature, which indirectly supports this position. Positivism entails a long and beneficial connection with the universe.

Pragmatism

The research philosophy of pragmatism relies on facts. It claims that the bulk of the time, the research problem decides the research philosophy. This research philosophy emphasizes the relevance of practical outcomes. additionally, pragmatism is unrelated to any ism or reality. Researchers are capable of constructing their own choices. they need the "freedom" of techniques, strategies, and processes that best suit their needs and research project goals. Pragmatists don't think that the planet is totally one. the reality is what's now in effect; it's unaffected by reality and mental dualism, and it exists independently of the mind. Because there are many various realities, pragmatism may be a study philosophy supported the thought that there's no one-size-fits-all approach to learning, but rather a spread of approaches to understanding. (Saunders, et al. 2012; Collis, et al. 2014; Wilson, 2010). the combination of various research methodologies, including both quantitative and qualitative research approaches, as a result, it's utilized to find out about the numerous realities. By integrating the viewpoints of individuals who have lived the events with scientific modeling and testing of knowledge and numbers, the researcher hopes to realize a stronger understanding of the manifestation problem under examination.

Realism

The study of the fact we sleep in is tied to the concept of realism. it's a non-conceptual and non-spiritual philosophy. In Realism, the term real refers to what's genuinely happening. It refers to things or events that occur within the world on their own. It opposes the event or fictitious object or imaginary. it's supported the notion that sensory information is correct, which what we see and listen to with our own eyes and ears is authentic and accurate. The physical world is objective and factual, while personal sentiments and needs are subjective and secondary, in step with this theory. As a result, objectivism is another name for this ideology. Aristotle is commonly considered to be the daddy of realism. the most protagonists of Realism include Locke, Rabelais, Erasmas, Comenius, Sir Francis Bacon, logician, and Milton.

Interpretivism

The history of interpretivism may be traced back to anthropology. However, because it is in contrast to positivism, it is also known as anti-positivism (Flick, 2014). Interpretivism is based on people's experiences and interpretations of them, and it is subjective, culturally, and historically placed. Researchers can never be completely divorced from their own beliefs and opinions, thus they will always impact how they obtain, interpret, and analyze data. According to interpretivism, reality can only be fully comprehended by subjective interpretation and participation in it. The

interpretivism philosophy stresses the study of events in their natural surroundings, despite the fact that scientists are unable to avoid affecting the phenomena they examine. They agree that many interpretations of reality may exist, but they assert that these perspectives are part of the information foundation they seek. Interpretivism's history is neither less brilliant nor any shorter than that of positivism. From a theoretical aspect, the philosophy of pragmatism is regarded to be suitable for this research issue; as previously said, the research philosophy of pragmatism may combine many different studies into one study. Furthermore, real observations are placed into quantifiable data collection forms that are used to estimate customer pleasure and return intent using a questionnaire survey. This benefit allows the study to completely run out of time, which is crucial to the study's goals. To put it another way, to collect all quantifiable data and information. Pragmatism is the philosophy of choice.

3.2 Research approach

The research approach of Saunders et al. is the second layer of their research onion. They distinguish between two types of research: inductive and deductive. The deductive method focuses on studying the literature to identify theories and notions that the researcher will evaluate using evidence. On the other hand, the inductive approach comprises obtaining data and creating a hypothesis based on the results of data analysis.

Deductive

"To check or falsify the hypothesis, theories of deductive methods or reasoning tests are utilized. These ideas are examined thoroughly utilizing quantitative approaches, almost usually with huge data sets, to deduce and test theory and hypothesis" (Håkansson, 2013). In other words, in the deductive approach, researchers will begin by constructing a hypothesis or hypothesis based on previous theories, then test and repair the ideas using previously obtained data. The phases of the deductive research approach are depicted in the diagram below (Social Science, 2021).

Figure 3.1: Deductive research

Inductive

To consider the research process, inductive approaches begin with observations and then propose hypotheses, which tend to be generalized. It refers to the explanation for why and how something

is the way it is. As a result, the result contains enough information to make sense. The data pertains to consumers' internal and external perspectives and experiences. (Hakansson, 2013)

In an inductive research method, researchers begin through gathering information on their topic. The researcher takes a break from data gathering to study the data from the birds after a big amount of data has been obtained. The researchers are now looking for patterns in the data and formulating a hypothesis to explain these patterns. Inductive researchers begin with a series of observations and then progress from these specific experiences to a broader set of beliefs about these experiences. (Social Science, 2021)

Figure 3.2: Inductive Research

In this study, the most suitable analytical tool is the deductive research technique. Using a logical technique to track the buying behavior of customers in a supermarket chain in Hanoi. Links between consumer behavior to buy or not to buy can also be discovered.

In this study, inductive research approaches to analytical research were determined to be too difficult to use. All findings are based on scientific and factual studies. Therefore, the deductive approach in this situation is appropriately used. In conclusion, the deductive research the approach is the most appropriate for this research.

3.3 Research methodology

Quantitative research, qualitative research, and mixed-method research are the three basic categories of research (Swanson and Holton, 2005; Kothari, 2008; Creswell, 2011).

Qualitative research method

Inductive qualitative research is inductive in nature, with the researcher looking for meanings and insights in a particular situation (Strauss and Corbin, 2008; Levitt et al., 2017). In a range of data collection and analysis approaches, purposeful sampling and semi-structured, open-ended interviews are used (Dudwick et al., 2006; Gopaldas, 2016).

It is an effective paradigm, according to Creswell (2009), that takes place in a natural setting and allows the researcher to develop a degree of depth from a high level of involvement in the actual experiences. It's a set of interpretive material methods for bringing the world into focus. It is described as "multi-method in focus" by Denzin and Lincoln (2005), with an interpretive,

naturalistic approach to the subject matter. It's a type of social science research that collects and analyzes non-numerical data in order to derive meaning from it in order to gain a better understanding of social life by researching specific people or places (Punch, 2013).

It's a snapshot of people's perceptions in a natural setting (Gentles et al., 2015). It is the study and interpretation of people's reactions to a variety of events. It investigates people's experiences, meanings, and relationships, as well as social processes and contextual circumstances that marginalize a group. It is less systematic in its description since it formulates and creates new theories (Leedy and Ormrod, 2001). This type of research examines the world in its natural setting, examining situations in order to comprehend the meanings that people derive from their daily lives (Walia, 2015). It concentrates on words rather than numbers.

Qualitative research methods sometimes overlook contextual sensitivity in favor of focusing on meanings and experiences (Silverman, 2010). The social and cultural constructs of the variables researched may be overlooked in qualitative research (Richards and Richards, 1994).

Because the qualitative method has some limitations as above, the quantitative research method solves some of its limitations.

Quantitative research method

Quantitative research, according to Burns and Grove (2005), is a formal, objective, rigorous, logical, and methodical technique for creating and refining information for problem-solving. (Rahman, 2017). Its designs are either experimental or non-experimental, with the goal of obtaining precise and reliable measurements. It requires methodically monitoring and recording the features or properties of objects or events with the purpose of revealing correlations within a population between an independent (predictor) variable and a dependent (outcome) variable (Best, 1981). The term "quantitative" refers to the number or amount (how many) of data acquired during a study that is in a quantified or numeric form, i.e., in statistical systems, such as Excel, Access, SPSS, Python, SAS, JMP, R, or Stata (White and Millar, 2014). Quantitative research explains phenomena by gathering numerical, unchanging precise data that is examined using mathematically based approaches, particularly statistics that ask who, what, when, where, how much, how many, and how questions. It is based on logic, numbers, and an objective viewpoint.

Original research, according to Creswell (2011), is "research in which the researcher decides what to investigate, asks precise, narrow questions, collects quantifiable data from participants, analyzes these numbers using statistics, and conducts the inquiry in an unbiased, objective manner." Human

interactions, personal values, meanings, beliefs, opinions, and feelings are all considered. It manipulates variables and controls natural occurrences (Rarner, 1989).

Characteristics

According to Given et al. (2008), in quantitative research, statistical, mathematical, or computational tools are employed to obtain accurate results. The purpose of quantitative research is to develop and apply mathematical models, theories, hypotheses, and statements concerning phenomena.

The advantage of quantitative

Quantitative research employs statistical, computational, mathematical, and other tools to produce accurate results by examining measurable, numerical correlations. It is frequently regarded as more accurate than qualitative research, which is concerned with collecting non-numerical data (Bryman, 2012; Goertz and Mahoney, 2012). The statistical package for social science (SPSS) is utilized in quantitative research, and data is calculated and conducted by computer, saving time and money. It is, after all, scientific in character, and the results of the research are more reliable (Connolly, 2007).

The following are some of the advantages of quantitative research: Walker (2005), Atieno (2009), and Choy (2014): It necessitates meticulous experimental design as well as the capacity to replicate both the test and the results by anyone. It enables the researcher to collect and analyze information. It aims to eliminate bias so that facts, instances, and phenomena can be analyzed objectively. It enables statistical comparisons between different groups. The information is quantitative and can usually be applied to a broader population. Because of their ability to measure data using statistics, test hypotheses are utilized in experiments. When statistical tests are done correctly, there is less chance of error during the investigation. The researcher is more impartial regarding the research findings since the relationships between an independent and dependent variable are investigated in depth. Large samples are emphasized since they can provide an overview of an area and highlight patterns, discrepancies, and so on.

To sum up, this study used a quantitative research method to guarantee that the amount of information and data acquired was sufficient. Using an online survey strategy to perform a quantitative survey would widen the reach of the survey, save money, and provide more specific and authentic survey data as compared to traditional research approaches such as interviewing or responding to direct surveys. As a result, quantitative research is an excellent option for this study.

For the purpose of ensuring the amount of information and data to be collected, the quantitative research method is used in this study. The reason in this study we do not use the qualitative method is because we need to understand what their research area is (specifically in the Vietnamese market), quantitative methods help us calculate accurate results to identify correlations that can be quantified and measured. If you want to measure that relationship, you must do it quantitatively, not qualitatively, because qualitative only works to understand, not measure. And we already have the scientific basis: the literature research based on satisfaction, and the concepts in chapter 2 are pretty clear. There are many studies in Vietnam using foreign models and they have already verified it in Vietnam. They also used quantitative methods to verify the scale in the Vietnamese market, so the understanding of research subjects in Vietnam in previous studies has been shown to be very good. A number of scales have been applied in studies in Vietnam, so the quality of the scale has high reliability and accuracy. Moreover, in Vietnam, there have been many studies already and not only limited to the retail industry, but also to different industries such as services, banking, etc. In addition, qualitative research often focuses on small samples and is often interviewed in-depth, so this method is very subjective, generalizability is limited, so sometimes it only shows the properties but it is not known if that property is important and popular. That's why we don't need to use qualitative methods anymore.

3.4 Research Design

The structure of research can be thought of as the "Glue" that keeps all of the pieces in a research project together; in other words, it is a blueprint for the proposed study endeavor.

A research design is a study effort that examines and obtains answers to submitted research questions using a strategy (Saunders, Lewis and Thornhill, 2012). The three sorts of study designs, according to Cooper and Schindler (2008), are exploratory, descriptive, and causal or explanatory. According to Neuman (2006), exploratory research entailed an endeavor to investigate and produce new ideas and themes in order to lay the groundwork for further research.

Different social scientists define research design in several ways; a number of the definitions include: “A research design is that the creation of conditions for the gathering and analysis of information in a very manner that tries to mix relevance to the research purpose with economy and procedure,” consistent with Jahoda, Deutch, and Cook. The plan, structure, and approach of a groundwork study are adjusted so as to confirm that the research questions are answered and variation is controlled. According to Henry Manheim, research design not only predicts and

describes the seemingly innumerable decisions related to data collection, processing, and analysis, but it also provides a logical foundation for these judgments. "A program detailing the methods and procedure for collecting and analyzing the needed information", according to Zikmund.

In this research paper, there are 5 steps to follow. The first is to understand the current situation of the retail market in Vietnam and especially the retail market in Hanoi, thereby drawing out the problems that supermarket chains are facing. After finding out the practical problems posed, proceed to determine the research objective, research object, research scope. To achieve the research goal, it is necessary to learn the theories and models related to the topic, from the studies done at home and abroad, from which to draw a hypothetical model for the research of the topic. After building a research model, to ensure the science of the topic, the team chooses a research method (quantitative research) and collects data from customers by answering online survey questions. After reaching the target audience to survey, analyze the actual data collected. This study uses SPSS software to analyze the data. The scale is tested by Cronbach's Alpha reliability and exploratory factor analysis. Then the scales were used in Pearson correlation analysis and linear regression analysis. One-Sample T-Test aims to determine the degree of influence of each factor on satisfaction and intention to return to purchase at supermarket chains in Hanoi. Finally, as an independent sample T test, ANOVA helps to compare the difference in intention to buy again of consumers in Hanoi by individual characteristics (gender, age, occupation, income) monthly, comparing domestic and foreign supermarkets, comparing grade I & II supermarkets with grade III supermarkets). Once the influence of the factors has been determined, proceed to come up with solutions to help the supermarket chain improve its quality and services.

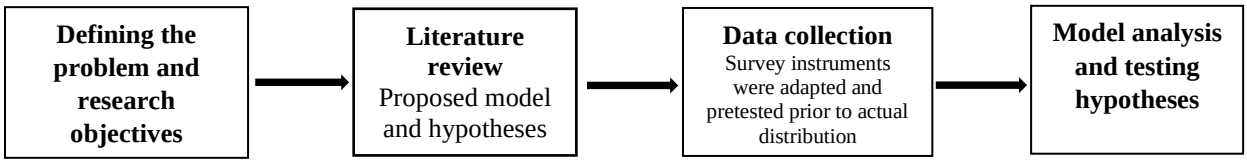

Figure 3.3 Research Design

3.5 Data collection method

3.5.1 Sampling techniques

According to Hair et al. (2012), there are two fundamental sampling designs: probability and nonprobability.

Probability sampling

A sampling at random is a simple method. A probability sampling process is simple random sampling. This method ensures that each sample unit has a known and equal chance of getting chosen. There are various advantages to simple random sampling. The method is simple to grasp, and the survey results can be extrapolated to a set target group with a predetermined margin of error. Another benefit is that simple random samples generate unbiased estimates of the characteristics of the population. This strategy ensures that, regardless of the sample size, every sampling unit has a known and equal chance of being chosen, resulting in a valid representation of the intended target population. The difficulty of collecting a complete and accurate listing of the target population members is the fundamental disadvantage of simple random sampling. All sampling units must be identified in simple random sampling. As a result, simple random sampling is best suited to small populations with reliable lists (Hair et al., 2012).

Nonprobability

Convenience sampling could be a way of taking samples supported how convenient it's. really, precisely assessing the sample's representativeness is difficult. Researchers should evaluate the impact of nonresponse errors while utilizing convenience sampling thanks to self-selection and therefore the voluntary nature of engaging in data collecting. Advantages Convenience sampling allows you to interview an outsized number of individuals in an exceedingly short amount of your time. As a result, it's frequently employed within the early stages of research, like construct and scale measurement development, likewise as questionnaire pretesting. However, developing structures and scales with convenience samples can be dangerous (Hair et al., 2012). Nonprobability sampling methods include convenience sampling, Purposive sampling, Quota sampling, and Snowball sampling.

Non-probability sampling, often called convenience sampling, is employed during this study. We chose judgment sampling since it absolutely was more convenient and low-cost to participate (Hair, 2003). This strategy will identify people with relevant knowledge and knowledge for a specific task. The goal of this research is to know the repurchase intention of consumers at supermarkets in Hanoi. Convenience sampling could be a sample approach that enables researchers to check a questionnaire while conducting a full survey. this can be also the sample approach that may save the researcher time and money hence it had been chosen for this study.

3.5.2 Data sources

Secondary data

The amount of knowledge may be a data test accustomed determine whether the database should be repositioned to the first database with other accountants, or new questions should be asked with old data. the number of knowledges could be a crucial aspect of the Research and Evaluation value (Glass, 1976).

The new data isn't being employed to its full potential, and there are no thanks to getting a correct notification. On the opposite hand, a variety of icons still exist. the information was obtained for a special reason and should not be ideal for the matter research at hand, or, within the case of qualitative data, is also difficult to gauge without identifying information about the notification and the scene (Hox and Boeije, 2005).

Primary data

Primary data is data that has been gathered from first-hand experience. Primary data, which is more credible, authentic, and objective, has yet to be published. Because primary data has not been updated or manipulated by humans, it's a better level of validity than secondary data Importance of Primary Data: it's vital to get information from primary sources and work with primary data in statistical surveys.

Primary Data Sources: Primary data sources are restricted, and it'd be difficult to urge information from them occasionally thanks to population scarcity or a scarcity of collaboration.

Experiments: Experiments necessitate a controlled or natural environment within which to conduct a logical investigation and collect data.

Survey: to some extent, the survey is that the most frequently used approach in social sciences, management, marketing, and psychology. Questionnaire: the questionnaire is intended in an exceedingly systematic manner and contains a variety of logical exercises. to realize the information needs, the researchers choose appropriate scales and build a questionnaire style. The researcher chooses the question format (unstructured or structured), question phrasing, scales, and directions for answering the questions, furthermore because of the scale and kind of knowledge needed (nominal, ordinal, fundamental measure, or scale). Researchers must evaluate how the information was collected while making these conclusions (Hair et al., 2012).

Interview: A face-to-face chat with the responder is named an interview. Face-to-face interviews are beneficial because detailed questions are asked; further probing will be done to produce rich data; literacy requirements of participants don't seem to be an issue; nonverbal data may be collected through observation; complex and unknown issues may be explored; response rates are

usually above for self-administered questionnaires. Face-to-face interviews have the subsequent disadvantages: they'll be costly and time-consuming; interviewers must be trained so as to cut back interviewer bias; they have to be administered in a very standardized manner; they're susceptible to interviewer bias and interpreter bias (if interpreters are used); sensitive issues could also be difficult.

Observations: Observation can happen with or without the observing person being aware that she is being watched. A questionnaire could be a research tool that consists of a collection of questions and other prompts that are accustomed collect data from respondents. it's not always the case that they're built for statistical analysis of the replies. Sir Galton (1822 – 1911) created the questionnaire. Questionnaires have advantages over other kinds of surveys therein they're inexpensive, involve less work from the questioner than verbal or telephone surveys, and often feature standardized responses that make data collection straightforward. Questionnaires, as a form of a survey, share many of the identical issues with question construction and wording as other forms of opinion surveys.

Secondary and first data were accustomed acquire data and knowledge for the study paper "Factors affecting customers satisfaction and its impact on repurchase intention: An empirical analysis within the context of supermarkets chains in Ha Noi, Vietnam", Websites, network relationships are used and gathered for secondary data. Surveys were utilized to collect information for primary data.

3.6 Sample characteristics and sample size

3.6.1 Sample characteristics

The major goal of this research is to look into the aspects that influence customer satisfaction and how they affect repurchase intention: An empirical analysis in the context of supermarket chains in Hanoi, Vietnam. As a result, the sample includes all Ha Noi customers. The target sample's characteristics are as follows:

Type of survey: Online survey

Age: from 18 age

Gender: Male/ Female and Others

Valid responses: 452

Research scope: Supermarket chains in Ha Noi city

3.6.2 Sample Size

The sample size is critical to the study's success. The sample size was estimated using a 5:1 ratio, as recommended by Hair et al. (2010). That means, depending on the quantitative nature of the issue, the sample size for this study should be at least five times larger. According to Kline (2005), proposed sample size criteria state that a sample of 100 is little, a sample of 100 to 200 is medium, and a sample of 200 or more is large. Nonetheless, Kline (2016) observed that a sample size of 200 might be insufficient for a complex model with non-normal distributions, especially if estimated methods other than maximum likelihood are used. Also, unless it analyzes a very simple model, any sample of fewer than 100 cases may not be advised for any form of approach. Nunnally (1978) went on to give criteria for academics who want to cross-validate regression analysis results. In particular, Nunnally suggested that if one wants to select the best variables from as many as 10 possible ones, there should be between 400 and 500 respondents.

In this study, we have 44 questions. According to Hair et al. (2010), the minimum sample size should be at least: n = 5 * 43 = 215. In which the actual sample collected is 452 surveys, satisfying the recommendations of Kline, Tabanick and Fidell.

3.7 Questionnaire design

The survey questionnaire is designed to obtain particular data from survey respondents while also elucidating the impact of satisfaction on customers' repurchase intentions to Hanoi supermarket chains for the future. The survey was collected in two weeks (from October 12th to October 26th, 2021) and were collected effectively online on Facebook groups. To avoid misunderstanding by survey participants, all questions used in the survey must be straightforward and succinct. The Nominal, Ordinal, Interval, and Ratio Scales are the four primary levels of the scale. Implement a straightforward method for determining the differences between various types.

Following Hair (2012), there are seven steps in Questionnaire design.

Step 1: Confirm research objectives

Step 2: Select appropriate data collection method

Step 3: Develop question and scaling

Step 4: Determine layout and evaluate the questionnaire

Step 5: Obtain initial client approval

Step 6: Pretest, revise, and finalize the questionnaire

Step 7: Implement the survey

A five-point (ordinal) scale should be used depending on the environment, according to Cox (1980). As a result, this study used the Likert five-point scale, which spans from "strongly disagree" to "strongly agree," to assess customer satisfaction and propensity to return to grocery stores. When responding to survey questions, participants expressed their level of agreement with a given topic. Cooper, Schindler, and Sun (2008) used a five-point scale to encourage respondents to make positive or negative choices in order to convey more explicit information and avoid an indifferent attitude, as described by Oppenheim (1992).

The questionnaire was built based on the scales from national and international studies provided from the literature review. From the literature review, a set of questions were constructed to measure the variables and some additional questions related to demographics. The questionnaire consists of 3 parts: part 1 is some filter questions; part 2 is some key questions about factors affecting satisfaction and its impact on repurchase intention; part 3 is information about customer demographics.

Before rolling out the survey to customers, the team pre-tested 10 people for them to do and verify first. The purpose of this Pretest is to check if the items are easy to understand, whether the sentences are suitable for Vietnamese speaking and writing, and whether the response time is taking too long to answer say no, then adjust accordingly.

3.8 Measurements scales

All variables are measured by multiple items, i.e. each variable is measured by multiple items, not just one item. Using a five-point Likert scale, with level one being extremely dissatisfied to level five being extremely satisfied.

On the basis of the proposed research model, the study proceeds to build scales for each influencing factor:

3.8.1 Product Quality

Product quality is measured by 6 items. These items are taken from the study of Quang and Hien (2019). Product quality is measured on a 5-point Likert scale adapted from Quang and Hien (2019).

Product Quality	PRODQ_1	Products at the supermarket chain have all kinds	(Quang and Hien, 2019)
	PRODQ_2	Supermarket products are guaranteed to be before the expiry date.	
	PRODQ_3	Supermarket chain have many new items.	
	PRODQ_4	Supermarket chain have adequate and clear labels.	
	PRODQ_5	Products at the supermarket chain ensure food safety standards	
	PRODQ_6	Supermarket products have legitimate origins.	

Table 3.1 Measurement scale of Product Quality

3.8.2 Perceived Price

Perceived price is measured by 7 items. These items are taken from the study of Sang (2015) and Tham (2019). Perceived price is measured on a 5-point Likert scale.

Perceived price	PRICEPER_1	The price of products is not higher than in the market	(Sang, 2015)
	PRICEPER_2	Prices are not higher than other supermarket chains	
	PRICEPER_3	The price of the products is commensurate with the quality.	
	PRICEPER_4	Prices of goods and products at supermarket chains are always stable.	(Tham, 2019)
	PRICEPER_5	Commodity prices are highly competitive in the market.	
	PRICEPER_6	Prices of goods and products at supermarkets are clearly listed and announced.	
	PRICEPER_7	Prices of supermarket items are clearly classified.	

Table 3.2 Measurement scale of Perceived price

3.8.3 Promotion

Promotion is measured by 5 items. These items are taken from the study of Truc (2013). Promotion is measured on a 5-point Likert scale.

Promotion	PROM_1	The program to accumulate points (loyal customers) of the attractive supermarket chain.	(Truc, 2013)
	PROM_2	Attractive supermarket chains discount programs.	
	PROM_3	The program of giving away attached products of attractive supermarket chains.	
	PROM_4	Lucky draw programs of attractive supermarket chains.	
	PROM_5	Attractive supermarket chain promotions.	

Table 3.3 Measurement scale of Promotion

3.8.4 Service quality

Service quality is measured by 8 items. These items are taken from the study of Quang and Hien (2019), and Truc (2013). Service Quality is measured on a 5-point Likert scale.

Service Quality	SERVQ_1	The security guard at the supermarket chain is friendly, enthusiastic, and cheerful.	(Quang and Hien, 2019)
	SERVQ_2	The supermarket fire protection system is periodically checked.	
	SERVQ_3	Security forces at the supermarket chain are trained in fire prevention.	
	SERVQ_4	At the supermarket chain, there is an automatic CO2 fire protection system.	
	SERVQ_5	Employees of the supermarket chain are always ready to serve customers.	(Truc, 2013)
	SERVQ_6	The staff of the supermarket chain is agile.	
	SERVQ_7	The staff of the supermarket chain enthusiastically answer customers' questions.	
	SERVQ_8	The staff of the supermarket chain is friendly and cheerful.	

Table 3.4 Measurement scale of Service Quality

3.8.5 Physical aspects

Physical aspects are measured by 8 items. These items are taken from the study of Sang (2015) and Tham (2019). Physical aspects are measured on a 5-point Likert scale.

Physical aspects	AMBI_1	Products at supermarket chains are easy to find.	(Sang, 2015)
	AMBI_2	The signage in the supermarket is clear.	
	AMBI_3	Convenient store for shopping.	
	AMBI_4	Goods and products at this supermarket chain are beautifully displayed.	(Tham, 2019)
	AMBI_5	The display and arrangement of goods by counters, shelves, and categories are convenient for searching.	
	AMBI_6	Food counters, dining, and entertainment areas for children are beautifully presented and hygienic.	
	AMBI_7	Products at the supermarket chain are decorated, displayed according to the season, special events, and programs to stimulate customer consumption.	
	AMBI_8	Products in a supermarket are arranged in a clear layout to create a spacious, airy and easy-to-move space.	

Table 3.5 Measurement scale of Physical aspects

3.8.6 Customer satisfaction

Satisfaction is measured by 6 items. These items are taken from the study of Noyan and Simsek (2012), and Quang and Hien (2019). Customer satisfaction is measured on a 5-point Likert scale.

Customer satisfaction	SATIS_1	I think shopping at this supermarket chain is a good decision.	(Noyan and Simsek, 2012)
	SATIS_2	This supermarket chain takes customer satisfaction as its goal.	
	SATIS_3	I am satisfied with my shopping at this supermarket chain.	
	SATIS_4	I am satisfied with the price to the product quality of this supermarket chain.	
	SATIS_5	I will come back to this supermarket chain in my next shopping.	(Quang and Hien, 2019)
	SATIS_6	I will recommend this supermarket chain to others.	

Table 3.6 Measurement scale of Customer satisfaction

3.8.7 Repurchase intention

Repurchase intention is measured by 4 items. These items are taken from the study of Simsek et al. (2012). Repurchase intention is measured on a 5-point Likert scale.

Repurchase intention	REINT_1	I plan to do most of my future shopping at this supermarket chain.	(Noyan and Simsek, 2012)
	REINT_2	If I go shopping today, I will continue to go to this supermarket chain.	
	REINT_3	Most of my shopping is from this supermarket chain.	
	REINT_4	When I shopping, the supermarket is the first choice.	

Table 3.7 Measurement scale of Repurchase Intention

3.9 Data analysis methods

The most widely used data analysis software is SPSS (Statistical Package for Social Science) (Muijs, 2010). In this study, our team decided to analyze the data using SPSS. Our study will look at the descriptive analysis, reliability analysis, correlation analysis, regression analysis using SPSS.

3.9.1 Descriptive analysis

The data from the respondents were statistically transformed into descriptive statistics. In descriptive statistics, the percentage, mean, mode, and variance of variables are used to examine data acquired from valid and incorrect responses. The results of analyzing these data can be used to characterize the data gathered.

3.9.2 Reliability analysis.

According to Cronbach (1951), Rules for Cronbach's Alpha is the measurement very reliable to show the results of this study:

Cronbach's Alpha	Internal consistency
$\alpha \geq 0.98$	excellent
$0.9 > \alpha \geq 0.8$	good
$0.8 > \alpha \geq 0.7$	acceptable
$0.7 > \alpha \geq 0.6$	questionable
$0.6 > \alpha \geq 0.5$	poor
$0.5 > \alpha$	unacceptable

Table 3.8 Rule of Cronbach's Alpha

Cronbach's alpha is a measure of consistency based on the change in the real score of a fundamental structure, where the structure is a hypothetical variable that may be evaluated. Hatcher goes on to say that the Alpha coefficient, which runs from 0 to 1, can be used to represent the consistency of features derived from dichotomy (i.e., questions with two possible answers) and/or questionnaires. The scale question has a multipoint format (for example, 1 = poor, 5 = excellent). When the Cronbach's alpha index approaches 1, the report's dependability improves.

3.9.3 Exploratory factor analysis (EFA)

When testing a scientific theory, we need to evaluate the reliability of the scale (Cronbach's Alpha) as well as its value (EFA).

Exploratory correlational analysis (EFA) is employed to scale back a collection of k observed variables to a group F (with $F < k$) of more relevant factors. In our studies, we normally gather a

giant number of variables similarly as a big number of observed variables that are connected with one another.

Instead of studying 20 sub-characteristics of an object, we are able to specialize in only four major characteristics, each of which has five minor characteristics that are related to each other. this protects time and money for researchers.

With Cronbach's Alpha scale reliability test, we are analyzing the link between variables within the same group, the identical factor, not considering the connection between all observed variables within the factors is different.

Meanwhile, EFA examines the relationships between variables across all different groups (factors) to see if there are any multifactor load observed variables or estimated observed variables that differ from the baseline head.

KMO coefficient (Kaiser-Meyer-Olkin)

The KMO coefficient (Kaiser-Meyer-Olkin) is a measure of considering the relevance of factor analysis. The KMO value must be 0.5 or greater ($0.5 \leq KMO \leq 1$), which is a necessary criterion for factor analysis to become suitable. If this value is less than 0.5, factor analysis is unlikely to be appropriate for the data set in the study. (Tho, 2013)

KMO must be greater than 0.50 (Kaiser, 1974) suggested:

KMO	Internal consistency
≥ 0.90	Very good
0.80 > KMO < 0.90	Good
0.8 ≥ KMO < 0.80	Yes
0.7 ≥ KMO < 0.70	Alright
0.60 ≥ KMO <0.60	Bad
< 0.50	Not acceptable

Table 3.9 Rule of KMO

Bartlett's test (Bartlett's test of sphericity)

Bartlett's demand test is employed to work out whether the observed variables within the factor are correlated. It's worth noting that the observed variables indicating different features of the identical component must be correlated with each other so as to use factor analysis. This point is connected to the convergence value discussed earlier within the EFA analysis. As a result, factor

analysis shouldn't be used on the variables into consideration if the test isn't statistically significant. The Bartlett's test has statistical significance (sig Bartlett's Test < 0.05), indicating that observed variables within the factor are associated.

Index Eigenvalue

In EFA analysis, the eigenvalue is a regularly used criterion to determine the number of factors. Only factors having an Eigenvalue ≥ 1 are kept in the analytical model (Hair et al., 2010).

Total Variance Explained

The total explained variance ≥ 50% suggests that the extracted factors represent the data well. (Hair et al., 2010). Considering the variability of the data to be 100%, this value indicates how much % of the elements extracted from the EFA were condensed and how much % of the observed variables were lost.

Factor Loading

The correlation relationship between the observed variable and also the factor, also known as the factor weight, is represented by the correlation. The higher the correlation between the observed variable and also the factor, and the other way around, the upper the factor loading coefficient. According to Hair (2009, p.116):

Factor Loading at 0.3: Minimum condition to stay the observed variable.

Factor Loading at 0.5: The observed variable has good statistical significance.

Factor Loading at 0.7: The observed variable has very good statistical significance.

On the other hand, the quality value of the Factor Loading has to rely upon the sample size. The degree of factor weight required for the observed variable to be statistically significant is different for each sample size interval.

Communalities

The Communalities value is the degree to which an item is correlated with all other items. Large Communalities values are better. If the variable's Communalities value is low (between 0.0 - 0.4), it indicates that the variable shows signs of loading multiple factors at once. In the Extraction column, a low value indicates candidates to discard after checking the pattern matrix or the rotated component matrix. The threshold criterion of Communalities value > 0.4 is acceptable.

3.9.4 Pearson Correlation analysis

We will use Pearson correlation analysis to assess the linear relationship between the independent and dependent representative variables obtained by EFA factor analysis. The Pearson correlation

coefficient (symbol r) is a statistic that is used to evaluate the closeness of a linear relationship between two quantitative variables (notice that Pearson only analyzes a linear relationship), not evaluating nonlinear relationships.

There is no role distinction between the two variables within the Pearson correlation, which incorporates the correlation between the independent variable and the independent variable, yet because of the correlation between the independent variable and the independent variable. Pearson correlation r incorporates a value starting from -1 to 1:

If r is closer to 1, -1: the stronger the linear correlation, the closer it is. Moving towards 1 is a correlation, moving to -1 is a negative correlation.

If r gets closer to 0, the linear correlation is weaker.

If r = 1: absolute linear correlation, when represented on the scatter plot, the points shown are going to be merged into a line.

If r = 0: there is no linear correlation. At now, there will be 2 situations. One, there is no relationship between the 2 variables, there is a nonlinear relationship between them.

Also, according to J. F. Hair et al. (2010), the strength and weakness of the variables are measured according to these rules:

Range of Coefficient	Description of Strength
±.81 to ±1.00	Very strong
±.61 to ±.80	Strong
±.41 to ±.60	Moderate
±.21 to ±.40	Weak
±.00 to ±.20	Weak to no relationship

Table 3.10 The variables' s rules

3.9.5 Regression analysis

Unlike Pearson correlation, the regressor does not have symmetric properties like correlation analysis. The independent variable and the dependent variable play different roles. While X and Y or Y and X are both substantially associated, we can only comment with regression that X impacts Y or Y affects X.

R2 (R Square) Value, Adjusted R2 (Adjusted R Square)

The level of explanation of the dependent variable by the independent variables is represented by the R2 (R Square) and adjusted R2 (Adjusted R Square) values in the regression model. Reflections

are corrected more precisely by R2 than by R2. The range of these two values is 0 to 1, however, no matter how good the model is., getting a value of 1 is practically nearly impossible. In most cases, this value can be found in the Model Summary table. It's worth noting that there's no set rule for how much R2 should be adjusted for the new model to match the requirements. The model is more significant the closer it is to 1, while the model is less significant the closer it is to 0 weaker. We usually divide into two branches with strong significance/weak significance, from 0.5 to 1 good model, less than 0.5 bad model, using an intermediate threshold of 0.5. However, depending on the type of research and data, a regression model does not always require an adjusted R2 value larger than 0.5 to be meaningful.

The sig value of the F. test

The sig value of the F test was used to assess the regression model's fit. We conclude that the multiple linear regression model fits the data set if sig is less than 0.05. The ANOVA table contains this information.

The sig value of the t. test

The sig value of the t-test was used to determine the significance of the regression coefficient. We can conclude that an independent variable has an impact on the dependent variable if the t-test sig of its regression coefficient is less than 0.05. If the independent variable's t-test sig is greater than 0.05, we can assume that it has no effect on the dependent variable and does not need to be deleted before running the next regression. We have a separate t-test for each independent variable since each regression coefficient corresponds to a different independent variable. This value can be found in the Coefficients table.

Variance magnification factor VIF

To check multicollinearity, the variance magnification factor VIF is utilized. If the VIF of an independent variable is greater than 10, the independent variable is most likely multicollinear. Then, in the regression model, this variable will not have enough value to explain the variation of the dependant variable. All VIFs were below the suggested threshold of 5, thus, multicollinearity was not an issue. (Kock, 2015)

Unnormalized regression coefficient Beta

When writing regression equations, we commonly employ this regression coefficient. Because the independent variables are not uniform in units or if the units are homogeneous, the standard deviation of the independent variables will not be considered variables are also different, based on

the unnormalized regression coefficient, we make no comments on the order of influence of the independent factors on the dependent variable. The non-normalized regression has the following structure:

$$Y = B0 + B1X1 + B2X2 + \ldots + BiXi + e$$

Xi is the value of the independent variable at the i^{st} observation;

βi is partial regression coefficients;

β0 is the coefficient of freedom

When one of the independent variables changes while the other independent variables remain constant, the regression coefficient for an equation of this type represents the change in the dependent variable. We will use the following formula when commenting: If no other variables alter their values when X1 changes by one unit, Y changes by one unit.

Normalized regression coefficient Beta

We usually use this regression coefficient to determine the order of influence of the independent factors on the dependent variable because the units and standard deviations of the variables participating in the regression model are consistent. The form of normalized regression is:

$$Y = Beta1X1 + Beta2X2 + \ldots + BetaiXi + e$$

We can assess if variable X has a strong or weak influence on variable Y based on the absolute value of the normalized regression coefficient. The greater the absolute value of the Beta coefficient, the greater the importance of the variable for Y. When the regression coefficient includes B or Beta and is positive, it indicates that the independent variable has a positive impact on the dependent variable; when it is negative, it indicates that the independent variable has a negative impact on the dependent variable.

3.9.6 One-way ANOVA and Independent samples T-Test analysis

Independent variable T-Test

In the instance of a qualitative variable with two values, we shall use the mean difference test. Gender (male, female), city (HCMC, Hanoi), and geographical variables, for example (North, South) ... We'll do it if the qualitative variable has three values. 3 pairs of comparisons (1-2, 1-3, 2-3). When the number of values increases to 4, 5, 6, ..., comparing each pair of such values becomes cumbersome and time-consuming. The Independent Samples Test table will be of interest to us. The sig of Levene's Test is the first value. There are two tests to execute in the table:

Levene's Test: The purpose is to compare the variances between two groups of values.

T-Test: The purpose is to test whether the mean between two groups of values is equal or not.

The T-Test will use the sig value in the Equal variances assumed or Equal variances not assumed row, depending on the findings of Levene's Test.

In case Levene's Test sig is less than 0.05

If Levene's Test sig is less than 0.05, then the variance between the two sexes is different, we will use the sig T-Test pink value in the row Equal variance is not assumed.

Sig T-Test value < 0.05, we conclude: There is a significant difference in the statistical system on the satisfaction level of employees with different limits.

Sig T-Test value ≥ 0.05 we conclude: There is no statistically significant difference in the level of satisfaction of employees with different limits.

Where sig Levene's Test is greater than or equal to 0.05

If Levene's Test sig is greater than or equal to 0.05 then the variance between the sexes is not different, we will use the Sig T-Test value in blue in the row that assumes Balanced Variance.

The sig T-Test value <0.05, we conclude: There is a statistically significant difference in the satisfaction level of employees of different genders.

T-Test sig value ≥ 0.05, we conclude: There is no statistically significant difference in satisfaction level of employees of different genders.

One-way ANOVA

ANOVA helps us to resolve the matter of the Independent Sample T-Test. This method helps us to check the mean of three or more groups. ANOVA has 3 methods: 1-way ANOVA, 2-way ANOVA, and MANOVA. We'll have an interest within the Levene's Test sig within the first Test of Homogeneity of Variances table:

Case Levene Statistics sig is greater than or equal to 0.05

In case of sig Levene Statistic is greater than or equal to 0.05, we use the ANOVA table for comment. If the F-test sig in the ANOVA table < 0.05, we conclude: There is a statistically significant difference in the intention of customers to return to buy at domestic and foreign supermarket chains. If the sig F test in the ANOVA table is ≥ 0.05, we conclude: There is no statistically significant difference in the intention of customers to return to buy at domestic and foreign supermarket chains.

Case Levene sig statistic is less than 0.05

In case of Levene sig statistic is less than 0.05, the hypothesis of equal variance between groups of qualitative variable values has been violated. We cannot use the ANOVA table, but we will use the Welch test results in the Robust test table for the case that violates the assumption of equal variance. Output results in Output, we will pay attention to the Robust Tests of Equality of Means table.

If the Welch test coefficient in the Robust Tests table < 0.05, we conclude: There is a statistically significant difference in the intention of customers to return to buy at the supermarket chains of Type I & II and supermarkets type III. If the Welch test index in the Robust Tests table is ≥ 0.05, we conclude: There is no statistically significant difference in the repurchase intention of customers type I&II and type III at supermarket chains.

3.10 Research ethics

Research ethics, as a subset of applied ethics, has well-defined rules and principles that guide researchers' behavior. In our day-to-day research operations, research ethics is crucial, demanding that researchers protect the dignity of their subjects and communicate their findings in an exceedingly very timely manner (Fouka and Mantzorou, 2011).

There are two basic philosophical approaches to scientific ethics: teleology and deontology (Blumberg et al, 2005). The teleological approach holds that the goals of the investigation justify the means. this suggests that the benefits of the research findings are also weighed against the risks of acting unethically. This, however, is additionally looking at the comparison made between the proportional good and also the bad generated (Frankena, 2001).

While deontological theories, which are diametrically opposed to teleological theories, assert that the goals of research can never justify unethical research. They claim that there are elements other than the goodness or badness of an action or regulation's outcomes that decide whether it is good or bad (Frankena, 2001). It would be ethically proper whether or not an activity achieves the best balance of good over evil. As a result, deception cannot be used to ensure authenticity and depend cannot be used to ensure the authenticity and dependability of data. It's critical to look at the history of research ethics and the theories that surround it in today's research after addressing the meaning of ethics and the two primary viewpoints that may be used to conceive research ethics.

Ethical issues in research

Norms aid researchers in achieving their objectives, which include sharing knowledge, reporting or stating the truth, and, finally, the duty to repair errors. The submission and approval of a search

proposal is the initial step in a procedure that leads to a specific research investigation. A researcher must adopt an acceptable approach in order to collect relevant data, present the findings, and analyze them effectively, resulting in data presentation in a logical order. After that, the information is analyzed and presented in a well-written article, project report, thesis, or book. It's vital for a researcher to keep appropriate values in mind at all times when performing the study. It's possible that scientific misconduct will develop if this isn't observed. And it is in this context that we look at ethical issues in research, with a focus on issues relating to the research itself, research subjects, and the research process.

Ethical issues related to research

A researcher must take care about disclosing his or her research findings if they'll jeopardize his or her sponsor's good working relationships. this can be obvious if the knowledge concentrates on the company's policies and will reveal sensitive information about the people or the organization. This necessitates effective collaboration with other scholars while also respecting the researchers' material possession rights. If this is often not followed to the letter, it should lead to revolt or maybe demonstrations.

Especially, privacy protection

In order to conduct the research, a number of the subsequent codes of ethics were provided not just for the respondents but also for the group members to follow.

First of all, it's essential in research to confirm that while conducting the research, we don't exploit and reach “accessible groups” (e.g children) for the needs of the research. Because they're not the most subject of the research topic. Furthermore, we want to confirm that every survey participants are a volunteer by asking if they're available and willing to require part within the survey.

Second, every respondent has the proper to settle on a solution that supports their experience, and that we won't force them to try and do what we would like. additionally, participants have the proper to understand all about our study, the aim of the study, who we are, how/why they were chosen to participate, what if they agree. participation, level of anonymity, and privacy. We guarantee the confidentiality of respondents' personal information and don't use their information for other purposes except for research. the aim of those rules is to respect our volunteers and make them feel comfortable completing the study.

Finally, we pledge that the results of the analysis and research won't negatively affect a person or organization. Furthermore, the authors are answerable for the course of this study, its results, and any relevance to the present study.

3.11 Conclusion

In summary, this chapter demonstrated the research methodologies, the chosen yoke, and the research model in detail. Data collection and analysis are critical components of future study. In various portions of the survey, the Likert scale is employed. In addition, to get at these final results, this study used analytical methodologies such as correlation analysis, descriptive analysis, regression analysis, and reliability analysis. The data analysis will be discussed in greater depth in the following chapter.

CHAPTER 4: DATA ANALYSIS AND FINDINGS

Introduction

In the previous chapter, the research model and method were implemented. In this chapter, the data collected from surveys are analyzed to determine factors that affect the repurchase intention of consumers. This chapter discusses the data analysis and findings from table 44 questions about the repurchase intention of consumers. The purpose of this study is to determine how the independent factors affect the dependent factor. Finally, this chapter also shows the shortcomings of the study and recommendations for similar studies in the future.

4.1 Preliminary data analysis

The table below shows that the observed values of all variables have a mean value above 3 (above the mean) on a 5-point Likert scale. Therefore, the majority of survey respondents agree with the observed variables. In addition, the variable with the lowest value is PRICEPER1 with a statistical score of 3,622. Besides, the observed variable with the highest observed score is SATIS5 with a statistical score of 4.004.

Valid shows that the number of observations has a valid value (the number of respondents) i.e. out of 500 survey participants, 452 surveys are valid. Because the data collection of the study was an online survey, there was no problem with missing values.

Variable	Minimum	Maximum	Mean	Std. Deviation
SATIS1	1.0	5.0	3.931	.8113
SATIS2	1.0	5.0	3.850	.7932
SATIS3	1.0	5.0	3.812	.8304
SATIS4	1.0	5.0	3.814	.8814
SATIS5	1.0	5.0	4.004	.8264
SATIS6	1.0	5.0	3.965	.8310
REIN1	1.0	5.0	3.843	.8044
REIN2	1.0	5.0	3.920	.7638
REIN3	1.0	5.0	3.774	.9499
REIN4	1.0	5.0	3.794	.8982
PRODQ1	1.0	5.0	3.976	.7974
PRODQ2	1.0	5.0	3.956	.7220
PRODQ3	1.0	5.0	3.912	.8080
PRODQ4	1.0	5.0	3.987	.7934
PRODQ5	1.0	5.0	3.936	.8090
PRODQ6	1.0	5.0	3.960	.7284
PRICEPER1	1.0	5.0	3.622	1.0037
PRICEPER2	1.0	5.0	3.646	.9099
PRICEPER3	1.0	5.0	3.763	.8313
PRICEPER4	1.0	5.0	3.874	.7905
PRICEPER6	1.0	5.0	3.909	.7582
PRICEPER7	1.0	5.0	3.916	.8002
PROM1	1.0	5.0	3.850	.8153
PROM2	1.0	5.0	3.763	.8286
PROM3	1.0	5.0	3.819	.8722
PROM4	1.0	5.0	3.708	.8727
PROM5	1.0	5.0	3.752	.8762
SERQ1	1.0	5.0	3.936	.7923
SERQ2	1.0	5.0	3.765	.7403
SERQ3	1.0	5.0	3.737	.8286
SERQ4	1.0	5.0	3.743	.7883
SERQ5	1.0	5.0	3.923	.8295
SERQ6	1.0	5.0	3.852	.7341
SERQ7	1.0	5.0	3.836	.8017
SERQ8	1.0	5.0	3.863	.7378
AMBI1	1.0	5.0	3.976	.7633
AMBI2	1.0	5.0	3.900	.7087
AMBI3	1.0	5.0	3.869	.7784
AMBI4	1.0	5.0	3.876	.7461
AMBI5	1.0	5.0	3.912	.7541
AMBI6	1.0	5.0	3.821	.8026
AMBI7	1.0	5.0	3.861	.8077
AMBI8	1.0	5.0	3.894	.7693

Table 4.1 Statistical results of variables

4.2 Respondents characteristics

The survey was collected in two weeks (from October 12 to October 26). The research was conducted with survey subjects who were consumers in Hanoi. All surveys were collected effectively online on Facebook groups. A total of 500 responses were collected including 48 invalid responses were excluded, the remaining 452 responses. Satisfactory data were coded and put into data processing using SPSS 20.0 software for analysis.

We categorize 452 respondents by gender, age, monthly income, occupation, and frequency of shopping at the supermarket.

a. Sample characteristics by gender

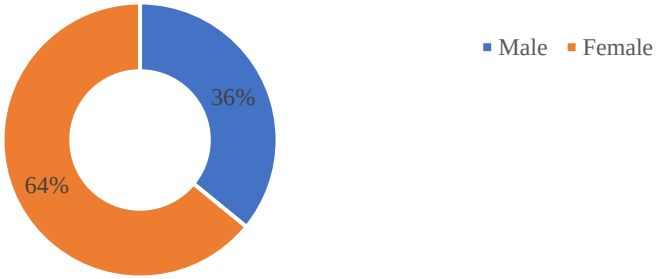

Chart 4.1: Gender of respondent profile

According to the survey results, there are 159 male respondents accounted for 35.2% and 293 female respondents accounted for 64.8%. As can be seen that the majority of consumers are female, which is quite consistent with the fact that females are often responsible for Purchases.

b. Sample characteristics by age

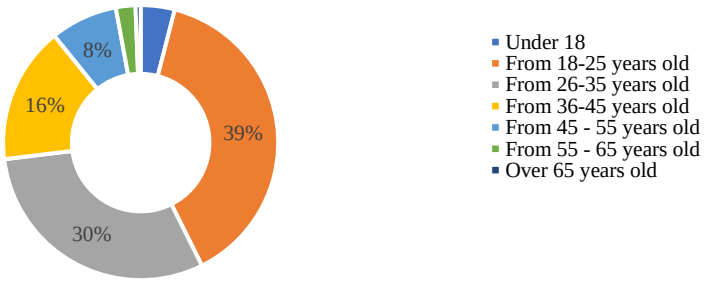

Chart 4.2: Age of respondent profile

According to the survey results, the number of respondents under 18 years old accounted for 3,8% (17 respondents). The age group from 18 to 25 years old accounted for 36,5% (165 respondents). The age group from 26 to 35 years old accounted for 31.6% (143 respondents). The age group

from 36 to 45 accounted for 16.8% (76 respondents). The age group from 45 years and older accounted for 11,3% (51 respondents). This is a pretty good result because that's the customer segment we're expecting. In addition, the young and middle-aged class accounted for more than half, considered the class with a lot of interest in shopping at supermarkets.

c. Sample characteristics by occupation

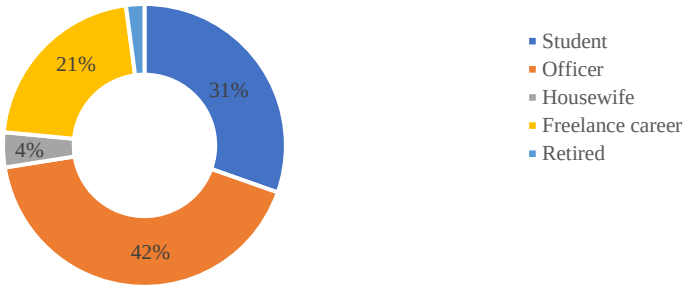

Chart 4.3: Occupation of respondent profile

The survey results showed that the number of survey participants included 130 students/students, accounting for 28.8%, 193 office workers accounted for 42.7%, 100 freelancers accounted for 22.1%, 10 retired people accounted for 2.2%, and 19 housewife accounted for 4.2%. The sample has many occupations, in which the occupation with the largest proportion is office workers.

d. Sample characteristics by monthly income

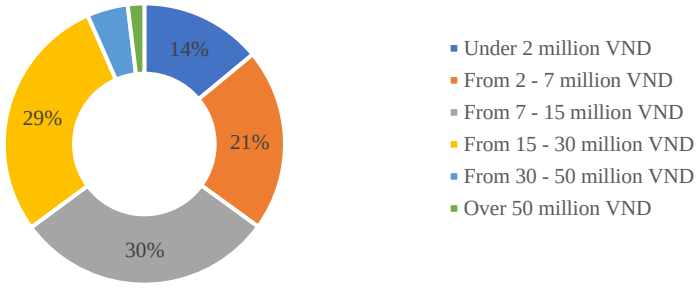

Chart 4.4: Income of respondent profile

According to the survey results, the number of consumers with income below 2 million VND/month accounted for 13.1% (59 respondents). Income from 2 to 7 million VND/month accounted for 20.4% (92 respondents). Income from 7 to 15 million accounts for the highest rate of 30,5% (138 respondents). Income from 15-30 million VND/month accounted for 29.6% (134 respondents). Income from 30 to 50 million VND/month accounts for 4.9% (22 respondents). Income over 50 million VND/month accounts for the lowest rate of 1.5% (7 respondents). It can

be seen that the average monthly income of Hanoi consumers is quite high, from 7 million VND to 30 million VND**.**

e. Sample characteristics by purchase frequency

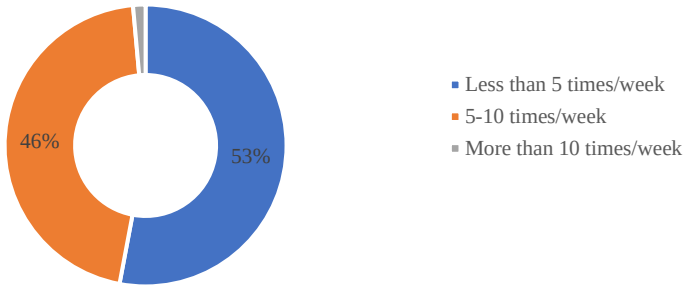

Chart 4.5: Purchase frequency of respondent profile

According to the survey results, the number of customers going to the supermarket less than 5 times a week accounted for the highest rate of 50% (226 respondents). Next, from 5 to 10 times a week, accounting for 46.5% (210 respondents). Finally, more than 10 times a week, accounting for 3.5% (16 respondents). It can be seen that the frequency of Hanoi people going to the supermarket is quite frequent.

f. Sample characteristics according to by payment when going to supermarket shopping

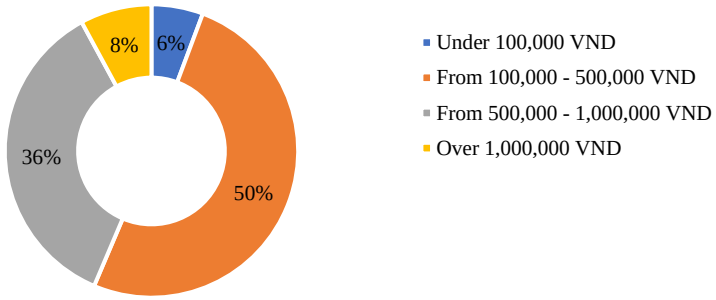

Chart 4.6: Payment when going to supermarket shopping of respondent profile

According to the survey results, customers usually pay for one supermarket visit at most from 100,000-500,000 VND, accounting for 50.4% (228 respondents). From 500,000 to 1,000,000 VND accounts for 36.3% (164 respondents). The group over 1,000,000 VND accounted for 7.7% (35 respondents). The group under 100,000 VND accounted for 5.5% (25 respondents). It can be seen that the level of payment of people in Hanoi is consistent with the average monthly income of the people.

4.3Exploratory factor analysis (EFA)

4.3.1 EFA results of independent variables

After analyzing EFA, the authors obtained the following results:

Item	Component					Communalities
	1	2	3	4	5	
PRODQ4	.704					.614
PRODQ5	.677					.611
PRODQ2	.651					.581
PRODQ6	.615					.534
PRODQ3	.590					.528
PRODQ1	.580					.540
PRICEPER7	.568					.546
PRICEPER3	.552					.525
PRICEPER4	.540					.540
PRICEPER6	.524					.523
SERQ1		.716				.652
SERQ5		.632				.575
PROM1		.621				.609
SERQ8		.584				.608
SERQ6		.581				.634
AMBI1		.578				.645
SERQ2		.518				.556
PROM2						.589
SERQ4						.570
AMBI8			.645			.634
AMBI7			.630			.611
AMBI6			.615			.654
AMBI2			.592			.613
AMBI4			.530			.585
AMBI5			.505			.619
AMBI3						.582
PRICEPER1				.783		.728
PRICEPER2				.696		.662
PROM4				.549	.540	.667
PRICEPER5				.527		.508
PROM5						.627
SERQ7					.632	.642
PROM3					.615	.689
SERQ3						522
% of variance	43.913	4.841	4.677	3.285	3.057	
Cumulative %	43.913	48.754	53.431	56.716	59.774	
Factorisation	**KMO** = 0,945; **Bartlett's Test:** p = 0.000 (χ^2 = 9556,185,769; ddl=561)					

Table 4.2 EFA results (1st time)

Table shows the KMO value is .945 (higher than 0.50), which satisfies the requirements to implement EFA (Hair et al. 2010). According to Kaiser (1974) if KMO > 0.90 means very good, then the KMO value in the table is 0.945 should be implemented for EFA.

Besides, a p-value of 0.000 < 0.05 may rule out hypothesis H0 (the correlation matrix is the unit matrix), implying that the variables are related and interconnected. Thus, this data is suitable for EFA implementation. After running the SPSS data for the first time, it was found that the variables PROM2, SERQ4, AMBI3, PROM5, SERQ3 with a loading factor of less than 0.05 did not satisfy the condition, so we delete variables one by one according to the iteration method.

After 7 runs, variables PROM2, SERQ4, AMBI3, PROM5, AMBI4, PRICEPER5, SERQ7, PRICEPER4, AMBI5, PRICEPER3 have load factor less than 0.05 and overlap between variables. It was therefore ineligible and was removed.

Item	Component					Communalities
	1	2	3	4	5	
PRODQ4	.752					.666
PRODQ2	.699					.611
PRODQ5	.681					.618
PRODQ6	.640					.565
PRODQ3	.621					.563
PRODQ1	.581					.533
PRICEPER7	.570					.575
PRICEPER6	.547					.564
SERQ1		.763				.704
SERQ5		.688				.616
SERQ8		.675				.634
SERQ6		.667				.630
AMBI1		.636				.661
SERQ2		.582				.568
PROM1		.529				.568
AMBI7			.774			.742
AMBI8			.671			.677
AMBI6			.670			.709
AMBI2			.516			.611
PRICEPER1				.816		.799
PRICEPER2				.753		.763
PROM3					.766	.783
PROM4					.759	.754
% of variance	44.977	6.076	5.734	4.410	3.641	
Cumulative %	44.977	51.053	56.787	61.197	64.838	
Factorisation	**KMO** = 0.939; **Bartlett's Test**: p = 0.000 (χ^2 = 5717.161; ddl =253)					

Table 4.3 EFA results (7st time)

The table shows the KMO value is .939 (higher than 0.50), which satisfies the requirements to implement EFA (Hair et al. 2010). According to Kaiser (1974), if KMO > 0.90 means very good, then the KMO value in the table is 0.939 should be implemented for EFA. Besides, the p-value is 0.000 <0.05 can reject hypothesis H0 (the correlation matrix is the unit matrix), which means that the variables are related and interconnected. Thus, this data is suitable for EFA implementation.

According to the results of the table above, the communalities values are all greater than 0.4, so they are all accepted. The total variance explained for factors is 64.84% (greater than 50%) which means the model is suitable for research. The model can explain the 64.84% variance of the dependent variable of customer repurchase intention about supermarkets chains in Ha Noi.

According to the result of the Rotated Component Matrix, variables of each factor meet requirements of convergent validity, except for the variables PRICEPER6, PRICEPER7, AMBI 1,

and PROM 2) and discriminant validity (variables that belong to this factor must be distinguished from other factors, except for the variables PRICEPER6, PRICEPER7, AMBI1, and PROM2).

In conclusion, the research model in the next analyzing test will obtain all variables. The rotated component matrix shows that:

The first component (1) is measured by: PRODQ4, PRODQ2, PRODQ5, PRODQ6, PRODQ3, PRODQ1, PRICEPER7, PRICEPER6. We interpret component (1) as "Product Quality". The second component (2) is measured by: SERQ1, SERQ5, SERQ8, SERQ6, AMBI1, SERQ2, PROM1. We interpret component (2) as "Service quality".

The third component (3) is measured by: AMBI7, AMBI8, AMBI6, AMBI2. We interpret component (3) as "Physical aspects". The fourth component (4) is measured by: PRICEPER1, PRICEPER2. We interpret component (4) as "Perceived price". The third component (5) is measured by: PROM3, PROM4. We interpret component (5) as "Promotion".

4.3.2 EFA results of dependent variables

a. Customer satisfaction

After analyzing EFA, the following results were obtained:

Item	Component	Communalities
SATIS1	.771	.594
SATIS2	.769	.592
SATIS3	.690	.477
SATIS4	.757	.574
SATIS5	.812	.659
SATIS6	.783	.614
% of variance	58.499	
Factorisation	**KMO** = 0.939; **Bartlett's Test**: p = 0.000 (χ^2 = 1249.721; ddl = 15)	

Table 4.4 EFA results of Satisfaction

According to Kaiser (1974) if KMO coefficient 0.70 < KMO < 0. 80, the KMO value in the table of 0.786 is performed for the EFA. The Sig value in the Bartlett test 0.000 < 0.05 demonstrates that the observed variables are correlated with each other in the population, and factor analysis (EFA) is appropriate.

According to the results of EFA analysis, at levels of Eigenvalues greater than 1, factor analysis extracted 1 factor from 5 observed variables with a cumulative extracted variance of 58.5% (> 50%) and loading coefficient The factors of the observed variables are all greater than 0.5, all of which meet the conditions. Satisfaction is a unidimensional construct.

b. Repurchase intention

Item	Component	Communalities
REIN1	.794	.630
REIN2	.798	.637
REIN3	.814	.662
REIN4	.798	.637
% of variance	64.151	
Factorisation	**KMO** = 0.739; **Bartlett's Test**: p = 0.000 (χ^2 = 629.965; ddl = 6)	

Table 4.5 EFA results of Repurchase intention

According to Kaiser (1974) if KMO number 0.70 < KMO < 0.80, the KMO value in the table of 0.739 is performed for the EFA. P-value in Bartlett's test 0.000 < 0.05 for related variable relationships in the population, factor analysis (EFA) is appropriate.

According to the results of EFA analysis, at Eigenvalues levels greater than 1, factor analysis takes 1 factor from 5 observed variables with a cumulative extracted variance of 64.2% (> 50%) and multiplier load factor. The factors of the observed variables are all greater than 0.5, all of which satisfy the condition. Repurchase intention is a unidimensional construct.

In conclusion, the results of EFA factor analysis showed that some observed variables did not meet the standards and were eliminated in the research model.

4.4 Reliability Test

Variable	Number of items	Corrected Item-Total Correlation	Alpha Cronbach
Product Quality	PRODQ4	.690	.884
	PRODQ2	.688	
	PRODQ5	.676	
	PRODQ6	.641	
	PRODQ3	.598	
	PRODQ1	.635	
	PRICEPER7	.645	
	PRICEPER6	.639	
Service Quality	SERQ1	.730	.879
	SERQ5	.667	
	SERQ8	.678	
	SERQ6	.661	
	SERQ2	.646	
	AMBI1	.662	
	PROM1	.609	
Physical aspects	AMBI7	.680	.829
	AMBI8	.664	
	AMBI6	.699	
	AMBI2	.583	
Perceived Price	PRICEPER1	.688	.813
	PRICEPER2	.688	
Promotion	PROM3	.641	.781
	PROM4	.641	
Customer Satisfaction	SATIS1	.645	.857
	SATIS2	.655	
	SATIS3	.570	
	SATIS4	.645	
	SATIS5	.702	
	SATIS6	.661	
Repurchase Intention	REIN1	.614	.811
	REIN2	.623	
	REIN3	.656	
	REIN4	.638	

Table 4.6 Reliability results

Cronbach's Alpha coefficient of PRODQ is 0.884 (greater than 0.8), which indicates a high level of internal consistency. the dimensions of the component, which has PRODQ1, PRODQ2, PRODQ3, PROD4, PROD5, PRODQ6 shows a comparatively high outcome in Corrected item-total Correlation (greater than 0.3). As a result, these variables meet two criteria and may be employed in this research.

SERQ has a Cronbach's Alpha coefficient of 0.880 (greater than 0.8), indicating high internal consistency. In Corrected item-total Correlation, the scale of the component, which includes SERQ1, SERQ5, SERQ8, SERQ6, SERQ2, AMBI1, PROM1, shows a relatively Corrected item-total Correlation (greater than 0.3). As a result, these variables satisfy two criteria and are suitable for use in this study. Cronbach's Alpha coefficient of RPQ is 0.829 (greater than 0.8), which indicates a high level of internal consistency. The scale of the component, which includes AMBI2, AMBI6, AMBI7, AMBI8, shows a relatively high outcome in Corrected item-total Correlation (greater than 0.3). As a result, these variables meet two criteria and can be used in this research.

PRICEPEER has a Cronbach's Alpha coefficient of 0.815 (greater than 0.8), indicating that it has a high level of internal consistency. In Corrected item-total Correlation, the component's scale, which includes PRICEPER1 and PRICEPER2, shows a relatively high result (greater than 0.3). As a result, these variables satisfy two criteria and are suitable for use in this study.

PROM has a Cronbach's Alpha coefficient of 0.781 (greater than 0.6), this indicates that there is a high degree of internal consistency. In Corrected item-total Correlation, the component's scale, which includes PROM3 and PROM4, shows a relatively high result (greater than 0.3). As a result, these variables satisfy two criteria and are suitable for use in this study.

SATIS has a Cronbach's Alpha coefficient of 0.857 (greater than 0.8), which indicates a high level of internal consistency. The scale of the component, which includes SATIS1, SATIS2, SATIS3, SATIS4, SATIS5, SATIS6 shows a relatively high outcome in Corrected item-total Correlation (greater than 0.3). As a result, these variables meet two criteria and can be used in this research.

REIN has a Cronbach's Alpha coefficient of 0.814 (greater than 0.8), indicating high internal consistency. The component's scale, which includes REIN1, REIN2, REIN3, and REIN4, has a relatively high Corrected item-total Correlation result (greater than 0.3). As a result, these variables satisfy two criteria and are suitable for use in this study.

To summarize, all variables (23 variables) are satisfied after using reliability tests for seven determinants because the total correlation value is greater than 0.3, Cronbach's Alpha coefficient is greater than 0.6, the correlation can be shown to be good, and the Cronbach's Alpha coefficient of each factor is not greater than if any items are deleted.

4.5 Pearson correlation analysis

		REIN	SATIS	PRODQ	SERQ	AMBI	PRICEPER	PROM
REIN	Pearson Correlation	1	.709**	.640**	.623**	.596**	.562**	.561**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	452	452	452	452	452	452	452
SATIS	Pearson Correlation	.709**	1	.748**	.670**	.620**	.519**	.498**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	452	452	452	452	452	452	452
PRODQ	Pearson Correlation	.640**	.748**	1	.716**	.717**	.514**	.522**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	452	452	452	452	452	452	452
SERQ	Pearson Correlation	.623**	.670**	.716**	1	.685**	.533**	.543**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	452	452	452	452	452	452	452
AMBI	Pearson Correlation	.596**	.620**	.717**	.685**	1	.473**	.539**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	452	452	452	452	452	452	452
PRICEPER	Pearson Correlation	.562**	.519**	.514**	.533**	.473**	1	.528**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	452	452	452	452	452	452	452
PROM	Pearson Correlation	.561**	.498**	.522**	.543**	.539**	.528**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	452	452	452	452	452	452	452

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

Table 4.8 Correlation test

The result shows that Sig. (2-tailed) is 0.000, indicating that all dimensions are related to one another. according to Pearson's correlation analysis:

- The Pearson Correlation between Product quality (PRODQ) and Customer satisfaction (SATIS) is 0.748, indicating a strong relationship.
- The Pearson Correlation between Service Quality (SERQ) and Customer Satisfaction (SATIS) is 0.670, indicating a strong relationship
- The Pearson Correlation between Physical aspects (AMBI) and Customer Satisfaction (SATIS) is 0.620, indicating that there is a strong relationship.

- Pearson Correlation between Perceived price (PRICEPER) and Customer satisfaction (SATIS) is 0.519 which shows a moderate relationship.
- The Pearson Correlation between Promotion (PROM) and Customer Satisfaction (SATIS) is 0.498, indicating a moderate relationship between the two variables.
- The Pearson Correlation between Service Quality (SERQ) and Product Quality (PRODQ) is 0.716, indicating a strong relationship between the two.
- The Pearson Correlation between Service Quality (SERQ) and Physical aspects (AMBI) is 0.685, indicating that there is a moderate relationship between the two.
- The Pearson Correlation between Service Quality (SERQ) and Perceived Price (PRICEPER) is 0.533, indicating that the two variables have a moderate relationship.
- The Pearson Correlation between Service Quality (SERQ) and Promotion (PROM) is 0.543, indicating that there is a moderate relationship between the two.
- Customer satisfaction (SATIS) and repurchase intention (REIN) have a Pearson correlation of 0.452, indicating a strong relationship.

4.6 Regression analysis

Based on the research model conducted in chapter 2, there are five factors that are believed to affect customer satisfaction: Product quality (PRODQ), Service quality (SERQ), Display (AMBI), Perceived price (PRICEPER), Promotion (PROM).

4.6.1 Impact of factors on Satisfaction

The multiple linear regression method with all the independent variables included at the same time (Enter method) shows that the regression model is suitable for testing the theoretical model.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.782[a]	.611	.607	.39716	2.129
a. Predictors: (Constant), PROM, PRODQ, PRICEPER, AMBI, SERQ					
b. Dependent Variable: SATIS					

Table 4.9 Model Summary (SATIS)

The authors use R2 adjustment to evaluate the fit of the regression model with the data set, this coefficient reflects the degree of influence of the independent variables on the dependent variable. Based on the results of the model summary table, the adjusted R2 value of 0.607 is smaller than the R2 coefficient of 0.611, indicating that the regression model fits the data at 0.607. In this study, 5 independent factors explain 60.7% of the change of the dependent variable "customer satisfaction", while the remaining 39.3% are due to out-of-model variables and random error course.

The value of Durbin Watson DW = 2.129 is in the range of 1.5 to 2.5, so the results do not violate the assumption of first-order series autocorrelation.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	110.595	5	22.119	140.226	.000[b]
Residual	70.351	446	.158		
Total	180.946	451			

a. Dependent Variable: SATIS
b. Predictors: (Constant), PROM, PRODQ, PRICEPER, AMBI, SERQ

Table 4.10 ANOVA (SATIS)

In this case, sig. of the F-test is 0.000 which is less than 0.05. Therefore, the dependent factor can be explained by the variables of the independent factors.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.318	.139		2.296	.022		
	PRODQ	.523	.053	.477	9.930	.000	.378	2.649
	SERQ	.214	.050	.199	4.246	.000	.395	2.529
	AMBI	.063	.047	.063	1.354	.176	.408	2.450
	PRICEPER	.081	.027	.113	3.004	.003	.618	1.617
	PROM	.038	.031	.047	1.233	.218	.589	1.698

a. Dependent Variable: SATIS

Table 4.11 Coefficients (SATIS)

Table 4.27 shows that, there is a variable "AMBI" with p-value = 0.176 > 0.05 and "PROM" has a p-value = 0.218 > 0.05 are non-significant impact, the variables have p values < 0.05 indicates significance at the 5% level of significance.

The variables in the model all have VIF values < 5, so there will be no multicollinearity between the independent variables.

Therefore, the non-normalized regression equation is derived as follows:

SATIS= 0.318 + 0.523*PRODQ + 0.214*SERQ + 0.081*PRICEPER + e

Through the linear regression equation, the factor "Product Quality" (PRODQ) is the factor that has the most influence on SATIS with beta Standardization coefficient = 0.523. Next is "Quality of service" SERQ with beta standardization coefficient = 0.214, finally the "Perceived price" factor (PRICEPER) with beta standardized coefficient = 0.081. These factors all have a positive impact on customer satisfaction when shopping at supermarket chains.

It also means that if the value of the variable "Product quality" increases by 1 unit, the "Repurchase intention" increases by 0.477 units. Similarly, the increase of the values: "Service

Quality" and "Perceived Price" will increase "Satisfaction" by 0.199 and 0.113 units respectively.

The research results have also identified a complete set of scales in this study includes 3 of factors: "Product quality", "Service quality", "Perceived price" and affecting "Satisfaction of customer".

4.6.2 Impact of Satisfaction on Repurchase Intention

After conducting a regression analysis between independent variables on customer satisfaction at supermarket chains in Hanoi, the team conducted a regression analysis between satisfaction and repurchases intention from customers at a chain of supermarkets in Hanoi.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.709[a]	.502	.501	.48382	1.999

a. Dependent variable: REIN
b. All requested variables entered.

Table 4.12 Model Summary (REIN)

Based on the results of the model summary table, the adjusted R2 value of 0.501 is smaller than the R2 coefficient of 0.502, indicating that the regression model fits the data at 0.501. In this study, the satisfaction factor explains 50.1% of the change of the dependent variable "customer's repurchase intention", while the remaining 49.9% is due to the out-of-model variable random pattern and error. The value of Durbin Watson DW= 2.199 is in the range of 1.5 to 2.5, so the results do not violate the assumption of first-order series autocorrelation.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	106.303	1	106.303	454.135	.000[b]
	Residual	105.335	450	.234		
	Total	211.639	451			

a. Dependent Variable: REIN

b. Predictors: (Constant), SATIS

Table 4.13 ANOVA (REIN)

In this case, sig. of the F-test is 0.000 which is less than 0.05. Therefore, the dependent factor can be explained by the variable of the independent factor.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.847	.142		5.965	.000		
	SATIS	.766	.036	.709	21.310	.000	1.000	1.000

a. Dependent Variable: REIN

Table 4.14 Coefficients (REIN)

According to the table above, since the VIF score of this factor is less than 5, multiple collinearities do not appear in this situation. Moreover, this independent factor has a Sig value less than 0.05. That means this factor in the research model is reliable and meets the requirements. The non-normalized regression equation is derived as follows:

REIN = 0.847 + 0.766*SATIS + e

Therefore, it can be concluded that customer satisfaction positively affects customer repurchase intention.

In conclusion, after the regression analysis of the factors, the above results show that the product quality factor (PRODQ) has the strongest impact on customer satisfaction when buying at the chain of supermarkets in the area of Hanoi. Next are the factors of service quality (SERQ), Perceived Price (PRICEPER). Satisfaction positively affects customer repurchase intention.

4.7 Control variables

4.7.1 Gender

This test is used to see if there is a difference between men and women in satisfaction and repurchase intention with supermarket purchases.

The Levene test has a value of Sig respectively is 0.000 and 0.001 < 0.05. Therefore, the variance between the sexes is different. We will use the sig T-test value in the Equal variances, not the assumed row. The results of testing the difference in satisfaction by gender are shown in the table below:

		Levene's Test for Equality of Variances		**t-test for Equality of Means**						
		F	Sig.	t	df	Sig. (2-tailed	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SATIS	**Equal variances assumed**	30.515	.000	-5.334	450	.000	-.32309	.06058	-.44213	-.20404
	Equal variances not assumed			-4.786	239.882	.000	-.32309	.06751	-.45608	-.19010
REIN	**Equal variances assumed**	11.794	.001	-5.758	450	.000	-.37539	.06519	-.50351	-.24728
	Equal variances not assumed			-5.456	277.950	.000	-.37439	.06880	-.51083	-.23996

Table 4.15 Independent Samples T-Test between Gender and SATIS, and REIN

The results show that the t-test has Sig. = 0.000 < 0.05 there is a statistically significant difference in the satisfaction and repurchase intention level of customers of different genders. Therefore, we accept the following hypothesis:

H7.1: There is a difference in satisfaction of consumers by gender.

H7.7: There is a difference in the repurchase intention of consumers by gender.

Gender is a control variable in our model.

	GENDER	N	Mean	Std. Deviation	Std. Error Mean
SATIS	**Male**	159	3.6866	.76039	.06030
	Female	293	4.0097	.51959	.03036
REIN	**Male**	159	3.5896	.73953	.05865
	Female	293	3.9650	.61573	.03597

Table 4.16 Group Statistics of Gender

From the results of the table above, in this case, women (4.01 and 3.97) are more satisfied and repurchase intention with supermarkets than men (3.69 and 3.59).

4.7.2 Category of supermarket

This test is used to see if there is a difference between category of supermarket in terms of supermarket shopping satisfaction and repurchase intention.

Levene test has Sig value respectively is 0.29 and 0.10 > 0.05. Therefore, the variance between the two types of supermarkets (domestic and foreign) is not different, we use the Sig t-test value in the equal variance assumed row.

The results of testing the difference in satisfaction by types category of supermarket are shown in the table below:

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SATIS	**Equal variances assumed**	1.111	.292	-.590	450	.556	-.03533	.05991	-.15307	.08242
	Equal variances not assumed			-.581	401.553	.562	-.03533	.06082	-.15490	.08424
REIN	**Equal variances assumed**	2.656	.104	-.369	450	.713	-.02390	.06481	-.15127	.10347
	Equal variances not assumed			-.364	408.198	.716	-.02390	.06561	-.15288	.10509

Table 4.17 Independent Samples Test between domestic supermarket, foreign supermarket and SATIS, and REIN

The results show that the t-test respectively has Sig. 0.56 and 0.71 > 0.05 there is no statistically significant difference in customer satisfaction about 2 different types of supermarkets. Therefore, we reject the following hypothesis:

H7.2: There is a difference in satisfaction when buying at category of supermarket.

H7.8: There is a difference in the repurchase intention when buying at category of supermarket.

4.7.3 Supermarket sizes

This test is used to see if there is a difference between supermarket sizes (type I & II supermarkets with type III supermarkets) in terms of shopping satisfaction and repurchase intention at supermarkets.

The results of testing the difference in satisfaction and repurchase intention by supermarket size categories are shown in the table below:

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SATIS	**Equal variances assumed**	1.381	.241	2.034	450	.043	.17098	.08408	.00575	.33622
	Equal variances not assumed			1.708	79.077	.092	.17098	.10013	-.02831	.37028
REIN	**Equal variances assumed**	2.741	.098	1.651	450	.099	.15038	.09107	-.02860	.32936
	Equal variances not assumed			1.407	79.798	.163	.15038	.10691	-.06239	.36315

Table 4.18 Independent Samples Test between supermarket sizes and SATIS, and REIN

The Levene test has a Sig value respectively is 0.24 and 0.09 > 0.05. Therefore, the variance between the two supermarket sizes (type I & II supermarket and type III supermarket) is not different, we use the sig t-test value in the row assuming equal variance.

The results show that the t-test of SATIS has Sig. = 0.04 < 0.05 there is a statistically significant difference in customer satisfaction about the size of 2 different supermarket groups. But the t-test of REIN has Sig. = 0.09 > 0.05 there is no statistically significant difference in the repurchase intention about the size of 2 different supermarket groups. Therefore, we accept the following hypothesis:

H7.3: There is a difference in customer satisfaction when shopping at supermarkets of different sizes.

And, we reject the following hypothesis:

H7.9: There is a difference in the repurchase intention when shopping at supermarkets of different sizes.

Supermarket size is the control variable. From the results of the table above, it can be seen that the scale of Type I & II supermarkets is larger than that of Type III supermarkets.

	Size	N	Mean	Std. Deviation	Std. Error Mean
SATIS	**Size I & II**	386	3.9210	.60375	.03073
	Size III	66	3.7500	.77418	.09530

Table 4.19 Group Statistics of Size

In fact, those who go to supermarkets with a supermarket size of 1 and 2 are more satisfied than those of a supermarket with a supermarket size of 3. Therefore, it is necessary to improve customer satisfaction for small supermarkets.

4.7.4 Age

	Levene Statistic	df1	df2	Sig.
SATIS	5.550	2	449	.004
REIN	4.160	2	449	.016

Table 4.20 Test of Homogenneity of Variances Age and SATIS, REIN

		Statistic[a]	df1	df2	Sig.
Welch	**SATIS**	.911	2	34.300	.412
	REIN	1.811	2	34.501	.179

a. Asymptotically F distributed.

Table 4.21 Robust Tests of Equality of Means between the identifier variable Age and SATIS, REIN

The table above shows the results of the Levene test for the age groups. Sig Levene test respectively is 0.00 and 0.01 < 0.05 means that the variance between different age groups is different, we use the welch test results in the Robust Tests table to comment. Results Sig. respectively is 0.41 and 0.17 > 0.05 can see that there is no statistically significant difference in the level of satisfaction and repurchase intention of the group of customers of different ages. Therefore, we reject the following hypothesis:

H7.4: There is a difference in customer satisfaction when shopping at supermarkets of different age groups.

H7.10: There is a difference in the repurchase intention when shopping at supermarkets of different age groups.

4.7.5 Income

	Levene Statistic	df1	df2	Sig.
SATIS	10.919	2	449	.000
REIN	17.495	2	449	.000

Table 4.22 Test of Homogenneity of Variances Income and SATIS, REIN

		Statistic[a]	df1	df2	Sig.
Welch	SATIS	3.815	2	72.428	.027
	REIN	7.084	2	72.466	.002

Table 4.23 Robust Tests of Equality of Means between the identifier variable Income and SATIS, REIN

The table above shows the results of the Levene test for the income groups. Sig Levene test = 0.00 < 0.05 means that the variance between groups of customers with different incomes is different, we use the welch test results in the Robust Tests table to comment. The results Sig. F respectively is 0.02 and 0.00 < 0.05 can conclude that there is a statistically significant difference in the level of satisfaction and repurchase intention of the group of customers with different incomes.

Therefore, we accept the following hypothesis:

H7.5: There is a difference in the satisfaction level of customers with different incomes between the income groups.

H7.11: There is a difference in the repurchase intention level of customers with different incomes between the income groups.

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
SATIS	Less 2 - 7 million	151	3.7969	.76228	.06203	3.6743	3.9195	1.00	5.00
	7 - 30 million	272	3.9663	.53361	.93235	3.9026	4.0300	1.00	5.00
	30 – over 50 million	29	3.7529	.68664	.12751	3.4917	4.0141	2.67	5.00
	Total	452	3.8960	.63341	.02979	3.8375	3.9546	1.00	5.00
REIN	Less 2 - 7 million	151	3.6573	.83597	.06803	3.5229	3.7917	1.00	5.00
	7 - 30 million	272	3.9375	.55984	.03395	3.8707	4.0043	1.00	5.00
	30 – over 50 million	29	3.7672	.71004	.13185	3.4972	4.0373	2.00	5.00
	Total	452	3.8330	.68503	.03222	3.7696	3.8963	1.00	5.00

Table 4.24 Group Statistics of Income

From the results of the table above, in this case, the group with income from 7 to 30 million accounted for the highest proportion compared to the remaining groups.

4.7.6 Occupation

	Levene Statistic	df1	df2	Sig.
SATIS	2.135	2	449	.119
REIN	4.607	2	449	.010

Table 4.25 Test of Homogenneity of Variances* Occupation *and SATIS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.1378	2	.689	.1471	.231
Within Groups	210.261	449	.468		
Total	211.639	451			

Table 4.26 One-way ANOVA between the identifier variable Occupation and SATIS

The table above shows the results of the Levene test for the occupational groups. Sig Levene test of SATIS = 0.119 > 0.05 means that the variance between groups of customers with different occupations is equal, we use the ANOVA table to comment. Results Sig F ANOVA= 0.581 > 0.05 can conclude that there is no statistically significant difference in the level of satisfaction of customers with different occupations. Therefore, we reject the following hypothesis:

H7.6: There is a difference in the satisfaction level of customers with different occupational groups.

	Statistic[a]	df1	df2	Sig.
Welch	2.331	2	264.170	.101

Table 4.27 Robust Tests of Equality of Means between the identifier variable Income and REIN

The table above shows the results of the Levene test for the occupational groups. Sig Levene test of REIN = 0.010 < 0.05 means that the variance between groups of customers with different occupations is equal, we use the welch test results in the Robust Tests table to comment. Results Sig F ANOVA= 0.101 > 0.05 can conclude that there is no statistically significant difference in the level of satisfaction of customers with different occupations. Therefore, we reject the following hypothesis:

H7.12: There is a difference in the repurchase intention level of customers with different occupational groups.

4.8 Discussion and implications

4.8.1. Impact of factors on satisfaction

a. Product quality

Product quality has the strongest impact on customer satisfaction when purchasing, with a beta coefficient = 0.477 (p < 0.05). This result shares the same opinion with the research results of Quang and Hien (2019). This result can be explained as follows: consumers in Hanoi care the most about product quality because they always aim for a safe and quality product. Therefore, they choose the supermarket as the shopping destination because the products in the supermarket have clear origins, ensuring food hygiene and safety.

In this study, the definition of Product quality is shown that consumers perceive product quality as, in addition to product quality, it is also partly related to the price at which the goods have been priced. That is a consumption concept behavior of a specific population, Hanoi people. According to Truc (2013), product quality is defined as the product at the supermarket chain with a full range of products, ensuring the expiry date, with many new items, with full labels, a clear origin, and ensuring food safety standards.

But in this study, the difference compared with previous studies is that after running EFA, the two variables of Perceived Price have a strong correlation to define Product Quality, so for consumers in Hanoi, the quality of products that customers buy in supermarkets is also closely related to the price they perceive, this price is defined as the price of products at the supermarket chain listed, announced and classified clearly. That proves that with the market in Vietnam, consumers define the quality of a product as closely related to a price already listed on that product. That is, it constitutes the consumer behavior of a part of the population, specifically here in Hanoi. It is clear that the perceived price factor helps to define the product quality somewhat.

In this study, our results show that: A high product quality means a high level of satisfaction. Product quality is the factor that has the greatest influence on customer satisfaction when shopping at supermarket chains. Indeed, in the era of a safe family economy, consumers pay more attention to food safety issues. Moreover, especially outside of traditional markets or places where there is no strict inspection of goods quality, the situation of food of unknown origin or food containing chemicals is sold a lot. Because there are too many markets and shops selling products that do not guarantee food safety and hygiene, it is very difficult to check and control product quality. A stable and abundant source of goods, invested in strict quality control, is an extremely important factor for customers to switch from shopping habits from traditional markets to supermarkets. Therefore, focusing on developing the source of goods and improving the quality of goods as well as the ability to supply goods is one of the important solutions to encourage customers to continue shopping at supermarket chains.

b. Service quality

Next, the second factor affecting satisfaction is service quality, with beta = 0.199 ($p < 0.05$), this result has the same opinion as to the research results of Quang and Hien (2019) and research of Truc (2013). This result is explained follows: when the service at the supermarket is good, they feel comfortable and secure when making a purchase.

In this study, the definition of Service quality is shown that consumers perceive and perceive service quality as in addition to service quality, it is also partly related to physical aspects and promotion. It shows that clearly in the perception of consumers in Hanoi, they perceive that the service quality at the supermarket chain is also related to the layout and promotion at that supermarket. According to Quang and Hien (2019), and Truc (2013), service quality includes: service attitudes of employees, security and safety systems at supermarket chains. But the new point in this study after running the EFA definition of service quality is also closely related to ambiance and promotion. Specifically, the products at the supermarket chain are displayed easily to find and the program to accumulate points at the supermarket chain is attractive.

In this study, our results show that: A high service quality means a high level of satisfaction. Through the research results, "Service quality" is the second most influential factor on customer satisfaction in supermarket chains in Hanoi. Nowadays, customers have more and more choices in shopping, so it is necessary to make customers happy in every stage from pre-purchase to post-purchase. It is necessary to make the value customers receive back not only in terms of the use-value of the product but also in terms of the spiritual value that customer service brings. Only in this way can customers increase their intention to continue shopping. We realize that service quality plays an important role in any industry, field, and business activity. Indeed, service quality is considered one of the most important factors to help create a sustainable competitive advantage and build trust with customers. When service quality is good, it will meet customer needs, thereby improving customer loyalty. The relationship between service quality and customer satisfaction is considered to be close and close to each other. This shows that when supermarket chains improve service quality, customer satisfaction will be maintained and become closer.

c. Price

The last factor affecting customer satisfaction is Perceived price, with beta = 0.113 ($p < 0.05$), this result shares the same opinion as to the results of research of Sang (2015) and research of Tham (2019). It can be seen that Perceived price is also a factor that consumers care about. Because the price at the supermarket is not much different from the price at the traditional market and is clearly listed.

In this study, the definition of Perceived price is shown that consumers perceive the price according to Sang (2015) and Tham (2019) as the product price is not higher than in the market, other supermarket chains, product prices are clearly listed, and classified. But in this study, after running EFA, the perception of the product's price in supermarket chains for customers in Hanoi

is only related to the fact that the product's price is not higher than in the market and is not higher than at other supermarkets chains. It can be understood that consumers in Hanoi pay much attention to the price difference at supermarkets compared to traditional markets and other supermarkets.

In this study, our results show that: A high Perceived Price means a high level of satisfaction. Perceived price is also the last factor affecting the decision, hereby determining the perceived price factor is very important, affecting the satisfaction in shopping and contributing to the competitiveness of supermarket with traditional market, retail store systems and with other supermarkets... For example, now the price in the supermarket is sold in odd numbers and one unit less (99k instead of 100k, 999k instead of 100k, 999k instead of 1 million). Setting retail prices to less than a single digit is a psychological trick, making customers less defensive about prices and easier to make purchasing decisions. On the other hand, by reaffirming the pricing strategy, pricing policy, and related policies such as promotions, discounts, and a program to earn points in exchange for preferential pricing policies, the role of customers as a key player in supermarket marketing strategies and programs is maintained.

Note that prices are perceived, not just prices displayed on supermarket shelves, so how do customers perceive our supermarket pricing to be more competitive than other stores? Another selling point is an issue that needs to be researched and has a very specific strategy and policy because the perception will depend on each customer group and the way it is perceived is also different, due to many factors (both internal and external at and outside the customer) decision. Through this, it is affirmed that it is necessary to understand customers and make decisions for issues related to marketing strategies such as: choosing markets, target customers, competitive strategies, positioning, etc. Customer satisfaction is the decisive method for the existence and development of retail business units.

d. Gender and supermarket size

Regarding gender, shopping trends between men and women are different. Most women shop on a whim, they not only buy necessary goods but also buy other complimentary items, that's why supermarkets often put shelves in main aisles and at counters exam. The intent is to encourage shoppers to add more products to their carts. In contrast, men often have a clear idea of what they want to buy, when they come to the store, they will go straight to that shelf and add to the cart without having to choose between many products of different brands as well as their prices.

Regarding supermarket size, customers tend to shop at supermarkets of type I & II, because here often they have more choices, have many items, many brands or different prices. In addition, many type I & II supermarkets also have many external facilities such as cinemas, amusement parks, ...

e. Promotion and Physical aspects

According to the research results, Promotion and physical aspects are two factors that do not affect customer satisfaction.

Promotion and physical aspects have beta coefficients of, respectively: 0.047 ($p > 0.05$) and 0.063 ($p > 0.05$). This result shares a different opinion as to the results of the research of Truc (2013), Sang (2015), and research of Tham (2019). It can be seen that promotion is a factor that does not affect customer satisfaction.

In this study, the definition of promotion is shown that consumers promotion according to Truc (2013) as the program to accumulate points (loyal customers), discount programs, giving away attached products, lucky draw programs, attractive supermarket chain promotions.

The definition of physical aspects is shown that consumers' physical aspects according to Sang (2015) and Tham (2019) as Products at supermarket chains are easy to find, the signage in the supermarket is clear, convenient store for shopping, goods, and products at this supermarket chain is beautifully displayed, the display and arrangement of goods by counters, shelves, and categories are convenient for searching, food counters, dining, and entertainment areas for children are beautifully presented and hygienic, products at the supermarket chain are decorated, displayed according to the season, special events, and programs to stimulate customer consumption, products in a supermarket are arranged in a clear layout to create a spacious, airy and easy-to-move space. But in this study, after running EFA, our results show that: Promotion and physical aspects have no impact on customer satisfaction.

Thereby, affirming that supermarket chains need to understand customers and offer more attractive and special promotions. In addition to providing eye-catching, easy-to-see, neat, and clean layouts to create a trust for customers, they easily find the products they want. From there, customers will feel comfortable, creating customer satisfaction.

4.8.2. Satisfaction impacts repurchase intention in the context of supermarket chains in Hanoi

Customer satisfaction has a positive impact on the repurchase intention of customers, with beta = 0.709 ($p < 0.05$), this result is in agreement with the results of Chae's study (Chae & Seo,

2011). It can be seen that when customers have a great shopping experience at the supermarket, the customer will be satisfied and lead to the intention to return to shop at the supermarket.

In Vietnam, research on customer satisfaction affects the intention to return to purchase at supermarket chains is still limited. But in the service industry and in the retail industry, there are many. For example, the research by Bang and Van (2020) measures the impact of perceived risk components on tourists' satisfaction and intention to return to Lam Dong destination of tourists. Or according to Huong, Giang, Ngoc and Ha (2021), studied the factors affecting satisfaction and intention to continue using food ordering applications on mobile devices of Vietnamese consumers. Through this, it can be seen that satisfaction has a strong impact on customers' intention to return. Satisfaction will bring the friendliness and trust of customers to the business, they will become loyal customers and are always interested in your products or services, thereby helping businesses collect more useful information from customers so that appropriate adjustments and improvements can be made to drive customers to return to purchase.

4.8.3. Control variables

Based on the research results, there are 2 control variables affecting customer satisfaction: gender and supermarket size, and 2 control variables affecting repurchase intention: gender and income.

a. Gender

Research results show that there is a difference in satisfaction between men and women. The proportion of women is more than that of men. According to Zoi Pirlympou (2017), it is concluded that men are more interested in brands than women. Furthermore, the fall in consumer prices affects women more than men. It is clear that companies must segment their target market, with a sub-segment, a gender segment. In other words, for better market coverage, the proposed marketing plan is different. In addition, it is concluded that discounting is very common in both sexes, with a predominantly female population.

b. Supermarket sizes

Second, for the supermarket size group. According to research results, the size of type I & II supermarkets is the most chosen by customers, so supermarket chains need to provide many items to have more choices for customers to ensure shopping space is comfortable. In addition, supermarkets should expand entertainment areas such as movies, children's play areas, ...

According to research results, the scale of type I & II supermarkets is being satisfied by customers more than the scale of type II supermarkets. Therefore, large supermarket chains

need to provide many items to have more choices for customers to ensure a comfortable shopping space. In addition, supermarkets should expand entertainment areas such as movies, children's play areas, ... Small supermarket chains should expand their scale, products, ... to improve customer satisfaction.

c. Income

According to the research results, the income level from 7-15 million/month accounts for the highest percentage. The above results show that the majority of customers shopping at supermarket chains have quite high incomes. This shows that the majority of customers shopping at the supermarket already have a job with a stable income, so they are more comfortable in spending and also due to the requirement of working time and the convenience that the supermarket has to offer to make them feel more satisfied. Therefore, supermarkets should learn more about income levels, thereby providing more products and services that are suitable for income levels.

4.9 Conclusion

This chapter includes descriptive data for the study sample, as well as the findings of testing the scale of research hypotheses using Cronbach's Alpha reliability assessment and exploratory factor analysis (EFA). Then, using the given hypotheses, test the research model's applicability with the proposed hypotheses.

According to the results of regression model research, there are three elements that affect satisfaction (SATIS) in descending order: the factor “Product quality” ($\beta = 0.477$) has the strongest impact on customer satisfaction. “Customer satisfaction”, followed by “Service quality” ($\beta = 0.199$) and followed by the factor “Perceived price” ($\beta = 0.113$). Two control variables were used in the study: gender and supermarket size measured in terms of category variables.

The next chapter provides a summary of the results and then recommendations for Government and businesses. Chapter 5 also mentions the limitations of this study and gives directions for further research.

Hypothesis	Report
H1: Product quality has a positive effect on customer satisfaction at supermarket chains	**Accepted**
H2: Perceived price has a positive effect on customer satisfaction at supermarket chains.	**Accepted**
H3: Promotion has a positive effect on customer satisfaction at supermarket chains.	Rejected
H4: Service quality has a positive effect on customer satisfaction at supermarket chains.	**Accepted**
H5: Physical aspects have a positive effect on customer satisfaction at supermarket chains.	Rejected

H6: Customer satisfaction has a positive impact on customers' repurchase intention at supermarket chains.	**Accepted**
H7.1: There is a difference in customer satisfaction of consumers by gender.	**Accepted**
H7.2: There is a difference in customer satisfaction when buying at category of supermarket.	Rejected
H7.3: There is a difference in customer satisfaction when shopping at supermarkets of different sizes.	**Accepted**
H7.4: There is a difference in customer satisfaction when shopping at supermarkets of different age groups.	Rejected
H7.5: There is a difference in the satisfaction level of customers with different incomes between the income groups.	**Accepted**
H7.6: There is a difference in the satisfaction level of customers with different occupational groups.	Rejected
H7.7: There is a difference in the repurchase intention of consumers by gender.	Rejected
H7.8: There is a difference in the repurchase intention when buying at category of supermarket.	Rejected
H7.9: There is a difference in the repurchase intention when shopping at supermarkets of different sizes.	Rejected
H7.10: There is a difference in the repurchase intention when shopping at supermarkets of different age groups.	Rejected
H7.11: There is a difference in the repurchase intention level of customers with different incomes between the income groups.	**Accepted**
H7.12: There is a difference in the repurchase intention level of customers with different occupational groups.	Rejected

Table 4.28 Hypothesis about all variables

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1. Summary of results

Chapter one mentioned 3 questions that the research has to find to state the factor affecting customer satisfaction and its impact on the repurchase intention of consumers at supermarket chains in Hanoi, Vietnam. Chapter one mentions 3 questions that the research must find out to state the factors affecting customer satisfaction and its impact on consumers repurchase intention at supermarket chains in Hanoi, Vietnam.

Filling the gaps in literature:

Firstly, most of the studies are concentrated in the South, and very few research articles on supermarket chains, the team testing model for supermarket chains in the Northern market.

Second, the studies on satisfaction and repurchase intention at supermarket chains have been done very little in developing countries, especially in Vietnam.

Third, very few studies mention control variables. The group analyzed that there are two control variables that both affect customer satisfaction and repurchase intention: gender and income, one variable that only affects customer satisfaction are supermarket sizes.

5.1.1 Research Question 1

Question 1: What factors affect the customer satisfaction of consumers at supermarket chains in Hanoi, Vietnam?

Factors affecting customer satisfaction when shopping at supermarket chains in Hanoi include five factors: (1) Product quality, (2) Perceived price, (3) Promotion, (4) Service quality, (5) Physical aspects. In which the factor "Product quality" has the strongest influence on customer satisfaction, followed by "Service quality" and "Perceived price". "Promotion" and "Physical aspects" are not statistically significant, so they will not affect customer satisfaction.

5.1.2 Research Question 2

Question 2: How does customer satisfaction impact on repurchase intention at supermarket chains in Ha Noi, Vietnam?

According to the results in Chapter 4, customer satisfaction has a positive effect on repurchase intention. Customer satisfaction is the level of people's satisfaction with the product quality and service quality that the supermarket provides. Therefore, satisfaction is the most important factor affecting repurchase intention.

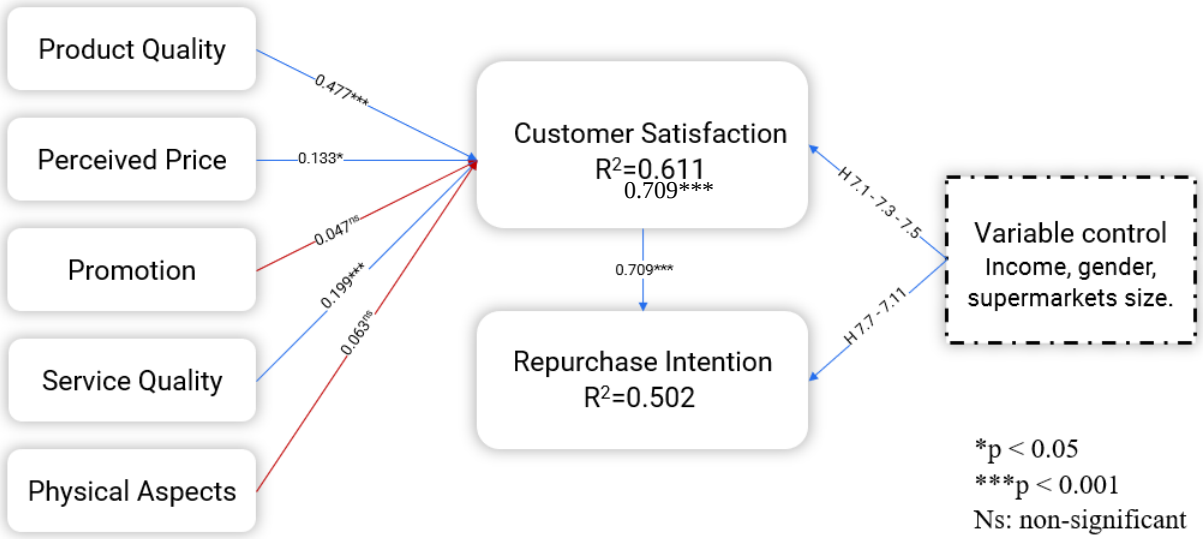

Table 4.27 Results of research

5.1.3 Research Question 3

Question 3: What solutions can be implemented to increase the number of returning consumers?

In order to promote the shopping of customers, supermarket chains should promote and focus on product quality, service quality, and perceived price. When product quality and service quality meet the minimum needs of customers, then customers have the repurchase intention. Perceived price is also a factor that needs to be considered in order for supermarkets to attract customers.

5.2 Recommendations

The study provides managers with marketing strategic directions to develop supermarket chains to bring satisfaction to customers. When they are really satisfied, they will intend to return for the next purchase. The factors that managers need to pay attention to are product quality, service quality, and perceived price. Besides, it is also necessary to consider the individual characteristics of customers such as gender and supermarket size to come up with appropriate strategies.

To implement this strategy, supermarket chains need to cooperate with agencies and non-governmental organizations to improve consumers' understanding and attitudes towards products.

On the basis of the above analysis results, the author makes some recommendations for supermarkets and the government to develop appropriate strategies, as well as enhance customer satisfaction and its impact to the repurchase intention:

5.2.1 Recommendations for supermarket

a. Product quality

First of all, in order to have a large and diverse source of goods, supermarket chains need to build close relationships with suppliers, invest in purchasing, expand the supply of quality products, help supermarkets create a competitive advantage in terms of abundant, high-quality, and abundant products.

In order to improve the quality of products, managers need to have policies to strengthen and expand cooperation with large, reputable enterprises with strong brands in the market so that goods and products have good quality. When products come from famous brands with clear origin and stable quality, it will be a big plus for supermarkets. Not only winning trust but also bringing satisfaction to customers, motivating customers to continue shopping.

Supermarkets must have a system to monitor the quality and shelf life of the products they sell, as well as the products in stock, on a regular basis. Absolutely do not leave damaged, expired products on sale on shelves. Take appropriate action for items that are close to their expiry date. For fresh food: These are the products that need the most-strict supervision and preservation because these are products that are very easily damaged when not stored properly. Supermarkets need to have a clear and accurate certificate of origin, production date, and expiry date to create trust and peace of mind for customers. Products with a short shelf life need to have an appropriate policy on quantity, to avoid shortage of insufficient or excess causing waste. Strictly monitor the process, ensure food safety and hygiene for cooked products and semi-processed products.

Besides, it is necessary to constantly update new products to meet customer needs. Reasonable inventory management, minimizing the shortage of goods. It is necessary to have a reasonable structure of goods because in reality there will be goods with very strong consumption, on the contrary, there will also be goods that are rarely purchased by customers. Therefore, supermarkets should consider the following: What types of products and goods are popular, corresponding to specific times of the year, and develop a reasonable and effective purchasing plan.

Department heads, counter managers need to directly supervise the stalls regularly to ensure that the goods on the shelves are not short. Department employees must check the product's labels and packaging after each working day to see if it has been damaged by the customer's shopping tour and perform the task of rearranging the product properly with its counters to ensure the customer's product search.

Supermarkets should take appropriate action against suppliers of goods that are not on time and of the wrong type.

b. Service quality

Service quality is reflected in 3 aspects: attitude, customer service, supermarket safety.

In any form of business, human resources always play an important role, especially for staff serving, sales, and cashiers who are in direct and regular contact with customers to retain customers. Therefore, the implementation of human resource strategy such as training staff by specialization, salary improvement, bonus, accompanying remuneration regimes... in order to attract talented human resources from outside.

“Customer service” is also an aspect that managers need to pay attention to, developing a fast home delivery service, because today's consumers expect to have home delivery, especially in the current time. During the current COVID-19 pandemic, online shopping has become more and more popular and convenient for people.

Ensuring supermarket safety is also one of the issues that should be concerned by supermarket managers because supermarkets are crowded places and also have the highest potential for fire and explosion. When people are not paying attention or employees are negligent or forget to turn off the switch at the end of the night shift, disconnecting the circuit breaker in the warehouse, office, or dining room can also lead to an electrical short and cause a fire. If a supermarket wants to limit fires, it must comply with fire safety. Supermarkets have to check their electronics regularly. Routine maintenance is an important requirement for timely detection and repair; Especially the fire protection system, fire alarm system.

Perfect customer service is a complex process with a combination of different resources. And you need to help all members, all departments understand the importance of putting customer satisfaction first, thereby getting the right, consistent and regular actions.

The study will help supermarket managers realize the importance of service quality for brand image, customer satisfaction, and customer loyalty. Therefore, managers should improve service quality from the customer's point of view, such as (improve supermarket facilities, customer commitment, employee-customer interaction, willingness to address customer concerns, and being prepared to address customer problems). If the customer's experience of the service quality of the supermarket has increased, customers tend to be positive towards customer satisfaction and loyalty. Besides, managers should come up with communication plans such as advertising, word of mouth, public relations, other promotional tools, etc., to increase consumer recognition of the image trademark.

c. Perceived price

Supermarkets need to change their pricing policies over time and types of goods. Competition-based pricing for processed products ensures prices are low or on par with competitors or traditional markets to attract customers.

Supermarkets should negotiate with goods suppliers to enjoy preferential prices that benefit all three parties: consumers, supermarkets, and suppliers. Supermarkets have a large network and scale as the output of many suppliers of wholesale products, this is also an advantage in negotiating and negotiating the supermarket's input purchase price. Supermarkets can buy and distribute goods to consumers at competitive prices in the market.

Prices should be listed clearly and specifically to help customers have a favorable view and easily compare prices between items.

The supermarket's own branded products are not only of good quality but also cheaper than similar products, so the development of the supermarket's own branded products is also an effective measure. in price competition of enterprises.

d. Gender, supermarket sizes and income

Based on the research results, there is a difference in customer satisfaction and repurchase intention between gender, supermarket sizes, and income. Therefore, businesses need to have a suitable orientation to promote satisfaction and repurchase intention among gender groups, supermarket sizes, and income groups.

First, for the gender group: Enterprises should diversify product categories to be diverse and suitable for each gender as well as their usage needs. Based on the results, the female gender group accounted for more than half of the respondents. Therefore, businesses should promote the production of consumer goods to serve the needs of life such as fresh food, vegetables, ... in addition, should add cosmetic products.

Second, for the supermarket size group: According to the research results, the scale of type I & II supermarkets are more satisfied by customers than type III supermarkets, so supermarket chains need to provide many items to have more choices for customers. Ensure a comfortable shopping space. In addition, supermarkets should expand entertainment areas such as movies, children's play areas, ...

Third, for the supermarket income groups, it is advisable to divide the customer file by each customer segment in terms of income, to provide factors suitable for each customer segment, thereby bringing satisfaction and repurchase intention of customers more clearly. For example, the high-income customer segment, they are attracted and expected by high-quality products,

so supermarkets need to diversify more high-end products. In contrast, the low-income customer segment will be more easily satisfied with products with low prices but still guaranteed quality.

5.2.2 Recommendations for government

The State needs to closely monitor and periodically check the origin and origin of input products, and the items sold at supermarkets to ensure that the goods are up to the state's standards. The government needs to have communication activities in society to orient consumers about the need for product quality improvement, thereby increasing consumers' awareness of product quality.

In addition, the government needs to come up with policies on price stabilization to regulate supply and demand so that the prices of goods and services do not rise too high or fall unreasonably low.

Next, the government needs to have communication activities in society to increase consumers' awareness of product quality at supermarket chains.

Furthermore, the government needs to regularly discuss with supermarket managers and periodically check with supermarket chains to ensure safety in supermarkets, especially fire protection systems.

Finally, the state needs to support reducing costs for supermarket chains: shipping cost, tax on imported goods, ... to reduce the selling price at the supermarket chains.

5.3 Limitations and perspective for future research

5.3.1 Limitations

During the time of collecting information and analyzing the factors affecting satisfaction and its impact on the repurchase intention of customers at supermarket chains in Hanoi, the study also has a limited number, partially affecting the results. The limitations are illustrated below:

Limited time: The study was carried out from September 2021 to December 2021, the implementation time is nearly 4 months, although not short but not too long to be able to find out the factors that motivate customers to continue. Continue shopping at the supermarket. As a result, the team had difficulty gathering and analyzing the information and turning it into meaningful data. Overall, the study was conducted on only 452 samples. With a longer duration, the results of the study are more reliable and realistic.

The next limitation is regarding the experience of the author, whose group consisted of a group of university students with limited experience in collecting meaningful information and analyzing data. During the implementation of the research paper, with the experience gained in

learning as well as in the process of exposure to reality, the author found that in the process of data processing and investigation, there are still many limitations and shortcomings. The conclusions, recommendations, and solutions given are opinions absorbed by the author in practice and in the investigation process, so errors and errors cannot be avoided during the research process.

The scope of the study is limited, the topic is only researched on a scale in Hanoi city by the method of non-random sampling, the research sample included in the topic is still subjective and narrow. Therefore, the proposed solutions are only representative to the extent appropriate to the actual situation at the moment in Hanoi, not all of Vietnam.

One of the limitations that can be combined with the mixing method is to both survey customers and observe them. But because the Covid epidemic situation is still complicated, it is impossible to go to supermarkets to observe customers.

The scale of factors is mainly built based on studies in other cities and foreign markets, so it is necessary to continue to research and consider more local-specific influencing factors.

Research, select, and analyze the general supermarket chain, but not for a specific or specialized product. Therefore, the analysis results do not apply to specialized supermarkets. In addition, the study only focused on supermarkets of type I & II, and supermarkets of type III, but convenience stores, grocery stores the study did not target.

5.3.2 The perspective for future research

With the limitations identified in section 5.3.1, the author proposes the next research direction as follows:

Due to the limited time and knowledge, the investment in depth of the topic has not been achieved as expected, the content presented in each presentation is still not perfect, and this will be a point of note for further studies.

The new study only considers a few factors affecting customer satisfaction, but there may be other factors that have not been fully explored by the study as identified in section 5.3. Further studies may conduct the survey on many factors other than the factors that the topic has investigated.

The research results are only representative of a typical area, not the results to explain the overall or larger scale of Vietnam. This is another limitation of the study and future research directions should overcome this. This study has only been studied in Hanoi, so it is not really comprehensive. Ideally, subsequent studies should study all three regions to compare regions with each other to make the comparison more diverse.

In addition, a limitation of the current study that is of interest to both researchers and marketing professionals is that these results represent consumer preferences about a Vietnamese City. The conclusions are not representative of the general population. One suggestion for the future for the present study is to study the repeatability of the procedures at a larger national scale.

Research, select, and analyze the general supermarket chain, but not for a specific or specialized product. Therefore, in the future, there may be research to compare these two types of supermarkets.

Finally, the study has shown a few factors on control variables that affect customer satisfaction and intention to return to buy at supermarket chains. Therefore, further studies need to explore new control variables (e.g geographic location).

5.4 Conclusion

After studying the topic "Factors affecting customers satisfaction and its impact on repurchase intention: An empirical analysis in the context of supermarkets chains in Hanoi, Vietnam", the research team has drawn the following conclusions: Firstly, there are many factors affecting customer satisfaction and its impact on the repurchase intention. The factor that has the biggest impact on customer satisfaction is the product quality factor. Secondly, the remaining two factors: Perceived price, and service quality, also have a relative impact on customers satisfaction. Besides, the control variables of gender, income, and supermarket size are also factors affecting customer satisfaction and repurchase intention. The data collected from the study has both theoretical and practical significance as it contributes to helping businesses improve their sales, sales, and branding processes in the future. During the research process, a number of solutions and research limitations were mentioned in order to review and improve the quality of services and products.

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APPENDIX 1

Questionnaire

Dear respondent,

We are from the research team of the Faculty of Business Administration of FPT University. We are conducting a survey on the topic of satisfaction and repurchase intention at supermarket chains in Hanoi." We hope that you will take a moment of 5-7 minutes to complete the questions. The success of this study depends heavily on your support by answering the survey below. Your answers mean a lot to us. We assure you. Your comments are for research purposes only and are kept completely confidential. Sincere thanks to the research team.

Part I. FILTER QUESTIONS

Question 1: Have you ever shopped at a supermarket? ☐ Used to ☐ Never

Question 2: Which supermarket was your last shopping ?

☐ AEON Viet Nam ☐ Big C ☐ Muji Mart ☐ Fivimart

☐ Lotte Mart ☐ Mega Market Viet Nam ☐ Tultraco ☐ Intime

☐ Co.op mart ☐ Emart ☐ FujiMart ☐ Marko

☐ Vinmart ☐ Other:.. ☐ Lanchi Mart ☐ Bach Hoa Xanh ☐ Citimart

Question 3: Where is that supermarket located? ☐ In Hanoi ☐ In another province

Question 4: Does the supermarket you go to most recently exist as a supermarket chain? (from 2 stores or more)

☐Yes ☐No ☐I don't know

Question 5: What was the size of the last supermarket you went to buy?

☐ Type I supermarket (Area > 5000m2: BigC, Megamarket, Co.op Mart, Aeon Mell, Vinmart +, ...)

☐ Type II supermarket (Area > 2000m2: Tultraco, Muji Mart, Fivimart...)

☐ Type III supermarket (Area > 500m2: Intimex, FujiMart, Marko, Bach Hoa Xanh, Citimart, ...)

☐ Convenience store with area < 500m2

Part II: Some key questions about factors affecting satisfaction and its impact on repurchase intention

Please indicate how much you agree with the statements regarding customer satisfaction and repurchase intention at that supermarket chain:(check an x in the box, where, 1 = totally disagree, 2 = disagree. agree, 3 = neutral, 4 =agree, 5 = totally agree).

SATISFACTION (SATIS)	1	2	3	4	5
1.I think shopping at this supermarket chain is a good decision.					
2.This supermarket chain takes customer satisfaction as its goal.					
3.I am satisfied with my shopping at this supermarket chain.					
4.I am satisfied with the price to the product quality of this supermarket chain.					
5.I will comeback to this supermarket chain in my next shopping.					
6.I will recommend this supermarket chain to others.					
Repurchase intention (REIN)	1	2	3	4	5
1.I plan to do most of my future shopping at this supermarket chain.					
2.If I go shopping today, I will continue to go to this supermarket chain.					
3.Most of my shopping is from this supermarket chain.					
4.When I shopping, the supermarket is the first choice.					
Product Quality (PRODQ)	1	2	3	4	5
1. Products at the supermarket chain have all kinds					
2.Supermarket products are guaranteed to be before the expiry date.					
3.Supermarkets chains have many new items.					
4.Supermarkets chains have adequate and clear labels.					
5.Products at the supermarket chain ensure food safety standards					
6.Supermarket products have legitimate origins.					
Perceived Price (PRICEPER)	1	2	3	4	5
1.The price of products is not higher than in the market					
2.Prices are not higher than other supermarket chains					

3.The price of the products is commensurate with the quality.					
4.Prices of goods and products at supermarket chains are always stable.					
5.Commodity prices are highly competitive in the market.					
6.Prices of goods and products at supermarkets are clearly listed and announced.					
7.Prices of supermarket items are clearly classified.					
PROMOTION(PROM)	1	2	3	4	5
1.The program to accumulate points (loyal customers) of the attractive supermarket chain.					
2.Attractive supermarket chains discount programs.					
3.The program of giving away attached products of attractive supermarket chains.					
4.Lucky draw programs of attractive supermarket chains.					
5.Attractive supermarket chain promotions.					
Service Quality (SERVQ)	1	2	3	4	5
1.The security guard at the supermarket chain is friendly, enthusiastic, and cheerful.					
2.The supermarket fire protection system is periodically checked.					
3.Security forces at the supermarket chain are trained in fire prevention.					
4.At the supermarket chain, there is an automatic CO2 fire protection system.					
5.Employees of the supermarket chain are always ready to serve customers.					
6.The staff of the supermarket chain is agile.					
7.The staff of the supermarket chain enthusiastically answer customers' questions.					
8.The staff of the supermarket chain is friendly and cheerful.					
Physical aspects (AMBI)	1	2	3	4	5
1.Products at supermarket chains are easy to find.					
2.The signage in the supermarket is clear.					
3.Convenient store for shopping.					
4.Goods and products at this supermarket chain are beautifully displayed.					
5.The display and arrangement of goods by counters, shelves, and categories are convenient for searching.					
6.Food counters, dining, and entertainment areas for children are beautifully presented and hygienic.					
7.Products at the supermarket chain are decorated, displayed according to the season, special events, and programs to stimulate customer consumption.					
8.Products in a supermarket are arranged in a clear layout to create a spacious, airy and easy-to-move space.					

Part III: Personal information

Question 1: What is your gender? ☐ Male ☐ Female ☐ Other

Question 2: How old are you?

☐ Under 18 ☐ Over 65 years old ☐ From 26-35 years old ☐ From 45 - 55 years old

☐ From 18-25 years old ☐ From 36-45 years old ☐ From 55 - 65 years old

Question 3: What is your monthly income?

☐ Under 2 million VND ☐ From 7 - 15 million VND ☐ From 15 - 30 million VND

☐ From 2 - 7 million VND ☐ From 30 - 50 million VND ☐ Over 50 million VND

Question 4: What is your occupation?

☐ Student ☐ Freelance career ☐ Housewife

☐ Officer ☐ Retired ☐ Other: .....

Question 5: How often do you go to the supermarket?

☐ Less than 5 times/week ☐ 5-10 times/week ☐ More than 10 times/week

Question 6: How much do you usually pay for a shopping trip at the supermarket?

☐ Under 100,000 VND ☐ From 500,000 - 1,000,000 VND

☐ From 100,000 - 500,000 VND ☐ Over 1,000,000 VND

APPENDIX 2

Data SPSS processing results

1. Descriptive statistics results

1.1 Survey information analysis

1.1.1 Sample characteristics by age group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 18	19	4	4	**4.3**
	18-25 years old	182	38.6	38.6	**42.9**
	26-35 years old	143	30.4	30.4	**73.3**
	36-45 years old	76	16.1	16.1	**89.4**
	45 - 55 years old	37	7.9	7.9	**97.3**
	55 - 65 years old	11	2.3	2.3	**99.6**
	Over 65 years old	3	0.6	0.6	**100**
	Total	471	100	100	

1.1.2 Sample characteristics by gender group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	169	35.9	35.9	**35.9**
	Female	302	64.1	64.1	**100**
	Total	471	100	100	

1.1.3 Sample characteristics by occupation group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	143	30.4	30.4	**30.4**
	Officer	198	42.1	42.1	**72.4**
	Housewife	19	4	4	**76.4**
	Freelance career	101	21.4	21.4	**97.8**
	Retired	10	2.1	2.1	**100**
	Total	471	100	100	

1.1.4 Sample characteristics by monthly income group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 2 million VND	66	14	14	**14**
	From 2 - 7 million VND	99	21	21	**35**
	From 7 - 15 million VND	141	29.9	29.9	**64.9**
	From 15 - 30 million VND	134	28.5	28.5	**93.4**
	From 30 - 50 million VND	22	4.7	4.7	**98.1**
	Over 50 million VND	9	1.9	1.9	**100**
	Total	471	100	100	

1.1.5 Sample characteristics by amount of money spent on each visit to the supermarket

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 100,000 VND	27	5.7	5.7	**5.7**
	From 100,000 – 500,000 VND	239	50.7	50.7	**56.4**
	From 500,000 – 1,000,000 VND	168	35.7	35.7	**92.1**
	Over 1,000,000 VND	37	7.9	7.9	**100**
	Total	471	100	100	

1.1.6 Sample characteristics by group of supermarket visits in a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 5 times/week	244	51.8	51.8	**51.8**
	5-10 times/week	210	44.6	44.6	**96.4**
	More than 10 times/week	17	3.6	3.6	**100**
	Total	471	100	100	

2. Reliability analysis results: Cronbach's Alpha

2.1. The Satisfaction scale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.857	.857	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SATIS1	19.44	10.407	.645	.507	.833
SATIS2	19.53	10.454	.655	.477	.832
SATIS3	19.56	10.663	.570	.470	.847
SATIS4	19.56	10.060	.645	.540	.834
SATIS5	19.37	10.079	.702	.615	.823
SATIS6	19.41	10.238	.661	.542	.830

2.2. The Repurchase intention scale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.811	.814	4

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
REIN1	11.49	4.716	.614	.429	.771
REIN2	11.41	4.833	.623	.438	.769
REIN3	11.56	4.088	.656	.468	.752
REIN4	11.54	4.320	.638	.448	.759

2.3. The Product Quality scale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.884	.884	8

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PRODQ4	27.56	16.286	.690	.526	.865
PRODQ2	27.60	16.747	.688	.524	.866
PRODQ5	27.62	16.268	.676	.527	.867
PRODQ6	27.59	16.956	.641	.454	.870
PRODQ3	27.64	16.728	.598	.416	.875
PRODQ1	27.58	16.573	.635	.460	.871
PRICEPER7	27.63	16.498	.645	.463	.870
PRICEPER6	27.64	16.789	.639	.451	.870

2.4. The Physical aspetcs scale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.829	.828	4

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
AMBI7	11.62	3.585	.680	.483	.773
AMBI8	11.58	3.747	.664	.441	.780
AMBI6	11.65	3.557	.699	.499	.764
AMBI2	11.58	4.134	.583	.346	.815

2.5. The Price Perceptionscale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.813	.815	2

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PRICEPER1	3.65	.828	.688	.474	
PRICEPER2	3.62	1.007	.688	.474	

2.6. The Promotion scale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.781	.781	2

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PROM3	3.71	.762	.641	.411	
PROM4	3.82	.761	.641	.411	

3. Exploratory factor analysis (EFA)

Test results of the independent variables

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.510	58.499	58.499	3.510	58.499	58.499
2	.916	15.266	73.765			
3	.575	9.584	83.349			
4	.438	7.308	90.657			
5	.332	5.534	96.191			
6	.229	3.809	100.000			
Extraction Method: Principal Component Analysis.						

Test results of the dependent variables.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.566	64.151	64.151	2.566	64.151	64.151
2	.674	16.846	80.998			
3	.428	10.708	91.706			
4	.332	8.294	100.000			
Extraction Method: Principal Component Analysis.						