

EXPLORING THE INFLUENCE OF LOYALTY
PROGRAMS ON CUSTOMER LOYALTY AMONG
UNIVERSITY STUDENTS IN MALAYSIA

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(HONOURS)

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BY

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A final year project submitted in partial fulfilment of the
requirement for the degree of

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(HONOURS)

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LIST OF ABBREVIATIONS

CL	Customer Loyalty
CS	Customer Satisfaction
CT	Customer Trust
CE	Customer Engagement
SN	Subjective Norm
ATT	Attitude
PBC	Perceived Behavioral Control
SET	Social Exchange Theory
TPB	Theory of Planned Behavior

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PREFACE

The growth of Malaysia's food and beverage (F&B) sector has increased competition among beverage providers, especially in their efforts to attract in and retain young customers. Thus, loyalty programs are now frequently used as a strategic tool to increase customer retention, strengthen company relationships, and encourage repeat business. Although loyalty programs are widely used, there is less evidence on how well these programs foster loyalty among university students, which are a significant customer market. Their purchasing decisions are depends on convenience, cost, and regular use of mobile applications, which makes them a crucial group to assess the results of loyalty programs. This study aims to give insights into the practical operation of loyalty programs and strategies for enhancing university students' retention in the food and beverage sector by examining their purchasing patterns, attitudes, and preferences.

ABSTRACT

In this growing food and beverage (F&B) sector, loyalty programs have become an essential marketing tool for companies to build long-term relationships with customers. Businesses currently depend heavily on loyalty programs to retain customers and boost engagement due to increased competition driven by ongoing growth of beverage brands. In this context, university students represent a major market with their high level of online usage, frequent buying beverages, and cost-conscious behaviors. Their daily use of mobile applications makes them as an appropriate population to evaluate how loyalty programs influence customer loyalty. This study examines the psychological and behavioral elements of customer satisfaction, trust, engagement, subjective norm, attitude, and perceive behavioral control that influence university students' loyalty in the food and beverage sector. Through an analysis of these frameworks, this study aims to provide a more insight on how loyalty programs work beyond reward, emphasizing the ways in which emotional value, accessibility, social influence, and perceived benefits support long-term customer loyalty. The ending of this study is not only an academic achievement, but also an opportunity to provide insight to existing research in consumer behavior and marketing strategy. I hope that the findings of this research will assist industry experts, researchers, and marketers to develop more successful loyalty programs that fulfil the needs and demands of university student

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

This chapter provides the background of the study by outlining the research background, research problem, research objectives, research questions, and research significance.

1.1 Research Background

Customer loyalty is becoming the most valuable asset in the twenty-first-century business (Singh & Sirdeshmukh, 2000). It describes a client's dedication to a company, usually shown by an ongoing relationship and a willingness to make repeat purchases (Gee et al., 2008). Loyal consumers frequently recommend a brand to others, which helps attract new customers (Agrawal et al., 2012). Hofman-Kohlmeyer (2016) stated that maintaining current customers is less costly than acquiring fresh ones, making customer loyalty essential to the success of food and beverage businesses. Hence, food and beverages businesses are expected to build long-term relationships with customers beyond selling products or goods.

In general, loyalty programs are meant to reward consumers and motivate them to continue purchasing from the same company (Sharp & Sharp, 1997). Once enrolled, a customer's involvement in the loyalty program will significantly impact their purchase decisions (Rese et al., 2013). Popular types of loyalty programs include points programs, tier programs, VIP programs, value-added programs, coalition programs, and game-based programs. The loyalty program offers items and services that are easily adjusted to customer needs and preferences. According to Vinod (2011), successful loyalty programs can help turn a delighted customer into a loyal one, protecting market dividends for an extended period. Loyalty program aims to

retain customers over the long run to increase profit, and both large and small companies use them extensively to predict upcoming improvement initiatives. (Ali & Ali, 2018).

In the food and beverage sector, a strong loyalty program can give businesses a significant competitive advantage. Loyalty programs are often used by local companies and foreign companies to increase customer loyalty. Loyalty programs are offered by fast food restaurants, coffee shops, and beverage outlets, such as Starbucks Rewards, McDonald's Rewards, and Tealive Rewards. In Malaysia, loyalty programs have replaced cards with mobile applications, which provide smooth experiences and quick reward tracking. These programs use mobile applications to provide in-app promotions, tiered rewards, and point-based systems. Moreover, they also provide tailored offers based on previous purchases, birthday rewards, or temporary discounts (Cheng et al. 2024).

For university students, features like cashless transactions, quick redemption, and mobile ordering are more attractive to them. This demographic is willing to join loyalty programs not just by saving money but also by the enjoyment of earning and using rewards, social influence, and recommendations from friends (Rashid et al., 2020). These loyalty programs use interactive elements, such as tiers of memberships, special events, or community service, combined with affordable rewards such as rebates, points, or cash back. As a result, this combination keeps university students engaged and connected to the brand, which supports satisfaction, loyalty, and repeat purchases.

1.2 Research Problem

In the highly competitive food and beverage (F&B) industry in Malaysia, businesses are difficult to maintain stable customer loyalty. The market has been crowded due to the growth of specialized businesses such as bubble tea shops and coffee shops. University students are a significant but overlooked market group, who are characterized by their price sensitivity, choice-seeking habits, and easy influenced by promotions. Therefore, they often switch brands to search uniqueness, freshness, and cheaper costs, which provides inconsistent revenue and makes it difficult for F&B companies to develop long-term customer loyalty. Additionally, prior studies on loyalty programs have mostly focused on the e-commerce and large retail industries (Hua et al., 2019). However, there is insufficient research exploring the loyalty programs in the food and beverage sector, particularly among university students. These sectors are unlike with the food and beverage industry, where purchases are often influenced by everyday routines and social trends. As a result, findings from earlier research could not be directly applicable to university students in the context of food and beverage.

Furthermore, many loyalty programs emphasize financial rewards such as points or discounts, while ignoring the emotional and personalized elements that students value. Students seek experiences that make them feel valued, recognized and connected to the company in along with financial savings. Therefore, their loyalty is greatly influenced by factors such as interactive digital engagement, unique reward, and customized incentives. Loyalty programs become only transactional when these emotional elements disappear, which can reduce F&B company ability to establish strong and lasting relationships with university students. As a result, to fill an essential gap in both academic research and reality, this study examines the influences of loyalty programs on customer loyalty among university students in the food and beverage sector in Malaysia. The results of the study will help to clarify the variables that influence customer loyalty, allowing F&B companies to create more appealing loyalty programs that appeal to university students.

1.3 Research Objectives

- 1) To investigate the behavioral patterns of mobile application usage for beverage purchases among university students over a defined period
- 2) To examine the factors of Social Exchange Theory that influence customer loyalty among university students in the food and beverage sector
- 3) To explore the factors of Theory of Planned Behavior that influence customer loyalty among university students in the food and beverage sector
- 4) To determine the most influential factors that influence university students' loyalty to beverage providers

1.4 Research Questions

- 1) What are the behavioral patterns of mobile application usage for beverage purchases among university students over a defined period?
- 2) What are the factors of Social Exchange Theory that influence customer loyalty among university students in the food and beverage sector?
- 3) What are the factors of Theory of Planned Behavior that influence customer loyalty among university students in the food and beverage sector?
- 4) Which are the most influential factors that contribute to customer loyalty among university students toward beverage providers?

1.5 Research Significance

This study provides food and beverage companies with useful knowledge about how university students' customer loyalty is impacted by loyalty programs. Spero and Stone (2004) stated that businesses have fostered an awareness of loyalty among young people to ensure their future business. By identifying these elements

that influence customer loyalty, Businesses may create more effective loyalty programs that meet university students' needs and interests. For instance, companies can determine which loyalty program types, such as point-based programs, membership programs, or referral programs, are more popular among college students (Chouffani, 2022). Hence, businesses can create loyalty programs that better suit university students' needs, preferences, and lifestyles.

Moreover, companies can adapt their strategies to satisfy the changing demands of university students, thus maintaining a competitive edge in this rapidly growing market. Additionally, this study allows businesses and marketers to develop more precise and effective marketing strategies. Marketers may develop campaigns that have a higher chance of engaging with university students by determining the elements that motivate their loyalty. For instance, a beverage company that targets university students can boost their participation and loyalty by offering rewards for participating in school events. Therefore, businesses may boost long-term brand loyalty and stronger customer relationships by integrating marketing efforts with these insights.

Furthermore, as the primary target audience, university students could benefit from this study. For instance, businesses can provide rewards that better suit students' preferences, such as special offers and student discounts, by recognizing the elements that affect their loyalty. This will enhance their satisfaction with the company, which will encourage further purchases and long-term customer loyalty. Therefore, these insights help businesses to create more successful loyalty programs that enhance customer relationships and boost university student retention.

1.6 Summary

This chapter outlined the research questions and objectives while providing more details on the study. Additionally, it highlighted the research issue and the importance of the study in assisting food and beverage firms in developing successful loyalty programs.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This chapter discussed theoretical concepts, literature reviews of variables, suggested framework, and the formulation of hypotheses.

2.1 Underlying Theories

2.1.1 Social Exchange Theory

Social Exchange Theory (SET) was proposed by Peter Blau in 1964, suggests that social behavior is based on exchanges in which individuals seek to gain valued rewards by giving up something (Nickerson, 2023). This theory is based on the ideas of behavioral psychology and utilitarian philosophy, which has a history in past intellectual frameworks (Cook & Rice, 2006). In addition, Social Exchange Theory was founded by Homans (1958) in his work *Social Behavior as Exchange*, in which he compared the individual activities with those in groups (Redmond, 2015). SET was defined by Cropanzano & Mitchell (2005) as an action performed by one person in response to another. According to Ahmad et al. (2013), individuals are motivated and reasonable to maximize benefits and minimize costs in their interactions. Therefore, when customers believe that a brand offers more advantages than disadvantages, they are more inclined to remain with it.

According to Social Exchange Theory, individual social behavior can be determined by four main components. First, the framework emphasizes resources and rewards, which encourage people to engage with one another.

In this theory, rewards such as knowledge, love, money, or status are the favorable result of a relationship. Resources allow an individual to deliver rewards, thus encouraging exchange interactions (Emerson, 1976; Foa & Foa, 2012). Emotional resources like love may be more valuable than material resources like money. The second element is the exchange processes, in which individuals use their judgment and prior experiences to balance the perceived costs and prospective benefits. In the words of Varey (2015), user perception is influenced by cultural variances, shifting cost-reward assessments over time, and changes in exchange perceptions. Third, social frameworks and elements of social capital influence and promote social exchange interactions. Norms, criteria, information sources, expectations, and obligations are the social components that form social capital (Best & Krueger, 2006). Reciprocity, which encourages duties in the relationship between parties, is the fourth principle that supports social exchange (Molm, 1997; Cropanzano & Mitchell, 2005; Emerson, 1976). A lack of reciprocity will lead to dissatisfaction and strain the relationships between individuals. Hence, reciprocity is essential as it encourages individuals to cooperate, trust one another, and become one entity.

Social Exchange Theory is important to clarify how customer satisfaction, customer trust, and customer engagement impact customer loyalty. Customer satisfaction arises when experiences meet or exceed their expectations, which encourages repeat purchase and loyalty (Oliver, 1999). For instance, when university students eat at Subway and receive freshly made food at a student-friendly price, their expectations are met. This satisfaction motivates university students to return frequently rather than switch to other brands. Morgan and Hunt (1994) point out that trust helps eliminate uncertainty, guaranteeing customers believe the company will provide value and strengthening the relationship between them. For example, university students may develop trust in Starbucks because the company continuously delivers consistent service and offers open reward redemption, which encourages brand loyalty. Engagement is crucial in building relationships between the brand and the company. For instance, university students feel more connected to the brand and are encouraged to visit more

frequently when they use Tealive Reward to accumulate points, redeem bonuses, and participate in special offers.

2.1.2 Theory of Planned Behavior

A well-known psychology framework, Theory of Planned Behavior (TPB) was created by Icek Azjen to better understand human behavior. In this framework, an individual's behaviors are motivated by their intentions, and these intentions are influenced by subjective norm, perceived behavioral control, and attitude (Kan & Fabrigar, 2017). According to Azjen (1991), subjective norms is a person's perception of how others view a specific behaviour. Attitude is a combination of a person's feelings, opinions, and preferences to act toward a particular person, situation, concept, or item. Perceived behavioral control is the key concept, which refers to an individual's perception of the ease or difficulty of performing the behavior (Brookes, 2023). Under this theory, intentions provide the motivational factors that influence behavioural performance.

According to this concept, Ajzen (1991) suggests that intentions and behaviors are more likely to occur when attitudes, subjective norms, and perceived behavioral control are positive. In consumer behaviour, researchers are requested to investigate consumer behavior using both external factors, such as subjective norms, and internal factors, such as attitudes and perceived behavioral control. Since its introduction, researchers have improved TPB by integrating more factors to better understand how intentions are formed and how they link to actual behaviors (Rozenkowska, 2023). Research indicates that customer loyalty is significantly impacted by peer influence, positive brand perceptions, and ease of access (Haris et al., 2021). Customers use behavioral, normative, and control beliefs to determine the value and effectiveness of attitudes toward a behavior (Hoque & Hossan, 2020). Therefore, this study applied this theory to explain the way consumer loyalty is affected by elements

including attitude, perceived behavioral control, and subjective norm. The food and beverage business often adopts the Theory of Planned Behavior to increase customer loyalty.

Customers' perceptions of a brand or loyalty program are shaped by their opinions about its benefits, value, and reliability. For instance, customers are more inclined to develop strong intentions to make additional purchases or remain involved when attitudes are good (Khan et al., 2023). Subjective norms, such as recommendations from loved ones or social media influencers, affect consumers' decisions to visit or join a loyalty program, thus increasing customer loyalty (Dong et al., 2022). For example, if university students see their friends using Starbucks Rewards, they feel social pressure to join too. Their decision to sign up for the program is influenced by these norms, which promote repeat business and increase their loyalty. Perceived behavioural control, such as easy access to rewards, mobile applications, or discount redemptions, is crucial for companies to increase customer loyalty. For instance, if a university student uses the Tealive loyalty program, Tealive Rewards to earn points and instantly redeem discounts, they feel convenient and satisfied, thereby boosting customer loyalty. Research in the food and beverage industry indicates that positive attitudes, strong social impact, and high perceived control significantly increase the rate of repeat business and customer loyalty (Kang & Kim, 2013).

2.2 Review of Variables

2.2.1 Dependent Variable: Customer Loyalty

Loyalty is a customer's overall feelings regarding a company, service, retailer, or seller (Dick & Basu, 1994). In other words, customer loyalty can be described as a consumer's ongoing preference for a specific brand

(Zeithaml et al., 1996). According to Hallowell (1996), the frequency of a customer's purchases and their word-of-mouth brand recommendations, can be used to determine the scale of customer loyalty. Moreover, Oliver (1999) mentioned that loyalty is the strong desire to consistently buy a preferred good or service, even when external factors or competitor offers exist.

Rowley (2005) divides loyal customers into four main groups. The first type is captive customers, who remain with a brand due to expensive switching costs rather than they truly prefer it. Convenience-seekers remain with a brand because it makes their purchasing experience convenient, familiar, and habitual. Contented customers do not have a deep bond with it, although they are comfortable and satisfied with the brand. Finally, committed consumers truly like the brand and recommend it to others, demonstrating their loyalty both visibly and emotionally. In this case, companies can modify their strategies for each type of loyalty due to this classification, which emphasizes that customers have various purposes for remaining with a company. Customers are more inclined to stick with a firm when they are happy with the products they receive. Hence, it can be challenging for any firm to maintain customer loyalty, especially in marketplaces with a lot of competitors and many choices.

In Malaysia, there are many cafes, restaurants, and beverage businesses competing for customers' attention, particularly among university students. It's extremely competitive to keep customers loyal in this market. Gultekin and Veuphuteh (2023) found that university student's loyalty is influenced by the price and overall quality of the food or beverage. The findings show that price sensitivity and perceived food quality influenced purchasing decisions. This indicates that the food and beverage industry, which targets university students, must maintain competitive pricing while ensuring good product quality.

2.2.2 Independent Variable: Customer Satisfaction

Customer satisfaction measures how well a company's products, services, or experiences can match or surpass the expectations of its customers (Panaitescu, 2025). Moreover, customer satisfaction can be characterized as an increase in feelings of varying intensities. This response is time-specific, concise, and concentrates on the key elements of purchasing or utilizing a product. Gronroos (1984) stated that customer satisfaction is a crucial component of the long-term prosperity of a company.

As mentioned by Spiteri & Dion (2004), there are two types of satisfaction, which are cumulative and transactional. Cumulative satisfaction is general satisfaction or the entire purchasing experience. They stated that ongoing purchases and the customer's overall experience with the product are the foundations of long-term satisfaction, such as appraising the seller (Johnson & Fornell, 1991). However, it is crucial to build and maintain long-lasting relationships between the business and its clients. On the other hand, transactional satisfaction is a short-term, product-specific measure that is derived from evaluating a single purchase. This satisfaction is unlikely to be examined further as it is limited to one-time purchases, frequently made by customers who did not repurchase the product after making an unexpected purchase.

According to Zia (2024), there are several key factors that can influence customer satisfaction. Product quality is a crucial consideration, as customers expect goods and services to meet their expectations, fulfill their demands, and function as intended. Next, service quality, such as includes personnel responsiveness, support accessibility, and customer empathy and understanding, is also essential. Additionally, price is also important as customers want to get an affordable price, and they will become dissatisfied when prices are high or inequitable. The last factors that influence customer satisfaction is convenience, which includes product availability, convenience in purchasing and payment, and prompt and reliable delivery.

In combination, these elements influence the total customer experience and determine how satisfied customers feel with a company.

Furthermore, customer satisfaction can be assessed through several methods. One of the widely used techniques is a survey, which can be conducted through online or in physical form, and includes both close-ended questions and open-ended questions. Moreover, customer feedback can be collected through social media, online review sites, and customer service contacts. All these methods provide crucial information on satisfaction levels and identify areas in need of development (Singh & Sirdeshmukh, 2000). Customer satisfaction is defined in this study as the overall evaluation made by students of their interactions with F&B loyalty programs.

2.2.3 Independent Variable: Customer Trust

Customer trust has been defined and evaluated in various ways within both social sciences and marketing. Based on Rotter's (1980), customer trust is the degree of dependability or assurance that one person provides to another within the context of an exchange relationship. In another way, customer trust is the belief that another person is trustworthy and honest, which is crucial in business transactions. In fact, Bagaskara and Sigit (2019) stated that building customer trust in a brand is important to boost customer loyalty. Chen & Dhillon (2003) outlined that the components that build trust are competence, integrity, and benevolence. Competence is the ability of a business to maintain and carry out promises made to customers. Integrity reflects that the customer believes the seller is truthful and will keep their promises. Benevolence is the willingness of a business to prioritize customers' interests beyond its own and care about their well-being.

In addition, Morrow et al. (2004) describe trust as having two main aspects, which are cognitive and conative capabilities. Cognitive capabilities reflect one's trust in the reliability and honesty of another person. Besides, conative

capabilities show a willingness to put trust in that person and follow through on it. Hence, trust is more than just believing someone is reliable; it also involves being willing to rely on them even when there is some level of uncertainty or risk. Hence, customer loyalty is mostly shaped by trust, especially in the food and beverage industry. Customer, especially students, frequently choose their favourite fast-food restaurants, cafés, or bubble tea shops based on perceived trustworthiness.

2.2.4 Independent Variable: Customer Engagement

Customer engagement is the degree of an individual's involvement and emotional attachment to a company's goods, services, or activities (Vivek et al, 2012). Developing customer engagement is a continuous effort, which begins when marketing efforts for a brand increase awareness of its goods and services. At the same time, customer engagement also demonstrates how much a consumer considers, connects with, interacts with, and engages with a brand on a social level (Pansari & Kumar, 2016). Customers' purchasing experience influences their emotional response to a brand, whether the outcome is positive or negative (Verleye, 2015). If they had an excellent experience, they are more willing to make repeat purchases. This type of engagement can bring benefits such as stronger loyalty, deeper emotional attachment, and active participation in brand communities.

Customer engagement can be divided into three categories such as cognitive, emotional, and behavioural engagement (Busalim et al., 2019). Cognitive engagement refers to a consumer's mental focus, including their attention, interest, and thinking processes. Next, emotional involvement is a customer's emotion related to a brand, such as confidence or inspiration. Meanwhile, behavioural engagement reflects the tangible actions the customers take, such as joining loyalty programs, writing product reviews, and participating in promotional activities (Emarsys, 2025). These four elements show how customer engagement goes beyond simple purchasing.

Therefore, customer engagement is important in enhancing university student's loyalty in this context. University students are inclined to remain engaged to it while positive emotions are created through activities like student-focused events or interactive marketing. These events transform students into active participants rather than passive consumers. Moreover, engagement promotes social interaction and brand advocacy, as students often share their experiences with their friends. For example, loyalty applications such as GrabRewards and MyMcDonald's Rewards that offer discounts for large purchases encourage users to invite friends.

2.2.5 Independent Variable: Subjective Norm

Subjective norms are the expectations that crucial people or groups will support and approve a particular action (Ham et al., 2015). Customers are more inclined to participate when their family and friends are supporting their actions. In other words, before making a purchase, customers seek out information from others to support their favourable opinions, and this information might influence their internal psychological state. Apart from that, subjective norm refers to the perceived social expectations that support or oppose a behaviour (Sus, 2023). La-Barbera and Ajzen (2020) stated that subjective norms had an impact on person's behavioral intention. These norms influence the loyalty behaviors of university students, who frequently purchase and promote brands that are supported by their social networks.

2.2.6 Independent Variable: Attitude

Attitude describes a person's overall evaluation, whether positive or negative, towards a thing, concept, or entity that is influenced by their ideas, feelings, and past experiences. According to Ajzen (2018) and Eagly & Chaiken (1993), attitude includes cognitive, affective, and behavioural components to reflect an individual's thoughts, feelings, and behaviours

about that subject. Cognitive components include a person's opinions, ideas, and understanding a person has about the topic. The affective component reflects the associated emotional responses or emotions, including trust, dislike, or preference. The behavioural component shows a person's propensity or willingness to react toward the object in a specific way, such as actively supporting it, avoiding it, or interacting with it.

A major study by Saini and Singh (2020) reveals a significant relationship between attitudinal loyalty and behavioural loyalty. Attitudinal loyalty is based on long-term passion, emotional connections, and trust rather than quick benefits. Dick and Basu (1994) mentioned that attitude loyalty emphasizes a customer's strong, positive opinion of a brand or seller. Consumers can distinguish between competitors easily and exhibit strong resilience to situations that could normally lead to brand switching (Jensen, 2011). Behavioural attitude describes a person's general assessment of performing a specific behaviour. Moreover, Ajzen (1991) emphasized that attitudes are an indicator of how strongly one believes in the expected results, and that the concept of expectancy-value explains whether an attitude is positive or negative. However, businesses must differentiate their brands with unique characteristics, enabling consumers to recognize them in the marketplace. In this study, university students will take part in loyalty programs if they have a positive view of the programs and think it is useful, enjoyable, and valuable.

2.2.7 Independent Variable: Perceived Behavioral Control

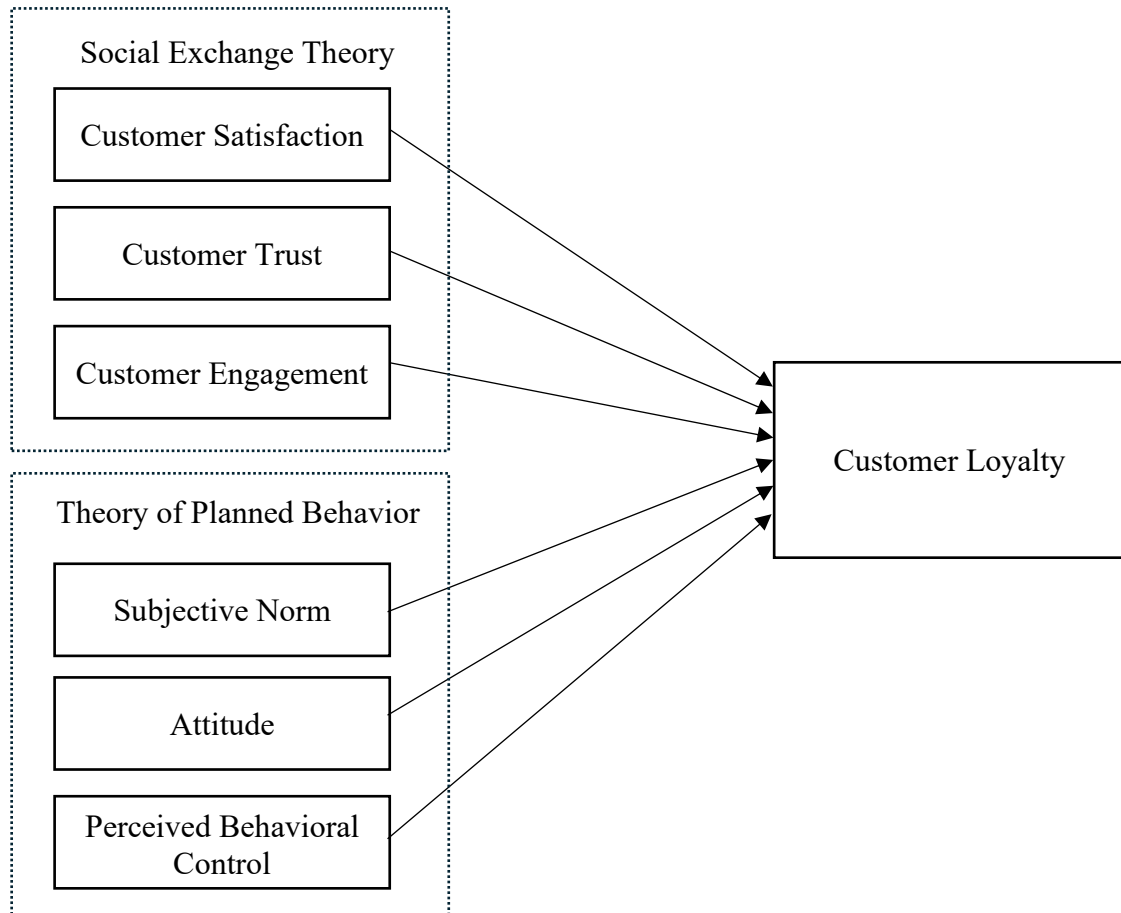
Perceived behavioral control (PBC) is someone's belief in what they can do a specific behavior. It can be impacted by both internal and external factors, which internal factors include personal characteristics that boost a person's belief in their own abilities, such as skills, knowledge, competence, self-discipline, and confidence. External factors, on the other hand, include

situational conditions like time, money, resources, opportunities, and social support that may benefit or harm the behaviour (Kidwell & Jewell, 2003).

Along with attitude and subjective norm, perceived behavioral control represents one of the components that define behavioral intention. When perceived behavioral control is high, individuals are more likely to act on their goals (Hagger et al., 2022). Hence, an individual is more likely to carry out a behaviour when they believe they have the necessary skills and resources (La Barbera & Ajzen, 2020). In other words, PBC serves as a key component that has a major impact on how behavioral intentions are formed within the theory of planned behavior framework (Akter & Hasan, 2022). Perceived behavioral control is connected to intention since individuals are unwilling to engage in actions that they feel are outside their control (Sheeran, 2002). PBC in this study is measured by students' confidence in their capacity to use loyalty programs effectively, which in turn affects their loyalty to the brand.

2.3 Research Framework

Table 2.3 Proposed Research Framework



Source: Developed for research.

2.4 Hypothesis Development

The relationships between the dependent variable are shown below:

H1: There is a positive relationship between customer satisfaction and customer loyalty on loyalty programs among university students in Malaysia.

H2: There is a positive relationship between customer trust and customer loyalty toward loyalty programs in Malaysia.

H3: There is a positive relationship between customer engagement and customer loyalty toward loyalty programs in Malaysia.

H4: There is a positive relationship between subjective norm and customer loyalty toward loyalty programs in the food and beverage industry.

H5: There is a positive relationship between attitude and customer loyalty toward loyalty programs in the food and beverage industry.

H6: There is a positive relationship between perceived behavioral control and customer loyalty toward loyalty programs in the food and beverage industry.

2.5 Conclusion

This chapter analyses the relationship between the independent and dependent variables by reviewing the literature generated by previous researchers. This study is also guided by Social Exchange Theory and Theory of Planned Behavior. Therefore, hypothesis development is proposed based on the latest findings in this chapter.

CHAPTER 3: METHODOLOGY

3.0 Introduction

Research design, sampling design, data collection method, research tool, pilot test, and data analyses are all covered in this chapter.

3.1 Research Design

This study adopts a quantitative research approach to evaluate how loyalty programs influence university students' loyalty. Likert-scale surveys used in this study to convert abstract ideas into structured, quantifiable data. Quantitative approaches convert theoretical ideas into numerical data, which allows statistical studies can identify relationships between variables and test hypotheses (Price & Lovell, 2018). It enables arriving at numerical data, thus offering a neutral perception of the given data (Creswell, 2023). Additionally, this method works well for examining relationships between variables, such as customer satisfaction, customer trust, customer engagement, subjective norm, perceived behavioral control, and customer loyalty. The models of Kumar and Reinartz (2012), emphasizing the necessity of measuring program design and outcomes for effective assessment, apply to loyalty program research when a quantitative approach is used. Accordingly, quantitative research can convert abstract ideas into quantifiable data, which supporting hypothesis testing and statistical analysis of variable correlations.

3.2 Population and Sample

In this study, the target sample are university students in Malaysia, as they represent a major consumer group in the food and beverage (F&B) sector. These students are between 18 to 30 years old. They are the most active group of young consumers

and are heavily involved with loyalty programs like membership cards, mobile applications, and point-based incentive programs provided by cafés, restaurants, and fast-food chains. Additionally, they are more price-sensitive than other consumer groups, which makes them attractive to rewards, rebates, and discounts. Hence, the study aims to gather data of university students on how loyalty programs influence customer loyalty.

3.2.1 Sampling Techniques

Convenience sampling has been chosen in this study. According to Frost (2021), convenience sampling is the process of selecting respondents who are most accessible to the researcher. Additionally, it is the cheapest and easiest method to gather preliminary data quickly without using a complex sampling procedure (Stewart, 2025).

3.2.2 Sampling Size

An adequate sample size is necessary to improve the precision and applicability of the study findings. It is estimated that between 75,000 and 1,000,000 university students are across Malaysia. According to Krejcie and Morgan (1970), a minimum of 384 respondents is required to achieve a 95% confidence level and 5% margin of error. However, Memon et al. (2020) suggested that a minimum of 200 respondents is required for quantitative research to produce accurate findings and preserve an adequate confidence interval.

3.3 Data Collection Method

Self-administered online survey constructed with Google Form is used in this study to gather data. Ponto (2015) stated that a survey is a research technique that gathers data from a sample of people using structured questions to gain insights about the larger population. To ensure a diverse population of respondents who meet those requirements, the survey will be distributed through social media platforms and student networks, which offer the targeted audience easy access and a wide reach. With technological advancement, online surveys have become an efficient way to collect data. Hence, this method was chosen as it is widely available, cost-effective, and convenient. Before the full survey is released, a pilot test involving 30 students will be carried out to improve the instrument's reliability.

3.3.1 Research Instrument

The primary instrument chosen for this study's data collection is the questionnaire. A questionnaire is a type of research instrument that provides participants a set of questions to collect relevant information. A structured questionnaire serves as the primary research tool in this study. It gathered primary data from college students about their opinions and experiences with loyalty programs in the food and beverage industry. The questionnaire is divided into three sections. Section A gathers demographic information, such as age, gender, ethnicity, type of university, frequency of food and beverage purchases, and mode of purchasing food and beverages. Section B gathers information regarding the respondents' perceptions, engagement, participation, and awareness of beverage brand loyalty programs, as well as their sharing habits and preferred rewards. Section C measures both the independent and dependent variables of the study. Independent variables include customer satisfaction, customer trust, customer engagement, subjective norm, attitude, and perceived behavioral control, while the

dependent variable is customer loyalty. In section C, the respondents' level of agreement with the specific question will be assessed using a 5-point Likert scale, where 5 points indicate strongly agree, 4 points indicate agree, 3 points indicate neutral, 2 points indicate disagree, and 1 point indicates strongly disagree.

3.3.2 Construct Measurement

Numerous times, surveys are used to evaluate quality. Likert scales are frequently used as an assessment tool in surveys. Responders are assessed based on their quality on a scale from highest to lowest (Allen & Seaman, 2007). Each structure's items in this study were gathered and modified from earlier research.

3.3.3 Scale Management

To create an effective and comprehensive questionnaire, it is crucial to understand and choose the right measurement scale. Levels of measurement describe the type of information that can be found in the data. According to Borgatta and Bohrnstedt (1980), measurement levels can be classified into four types such as nominal, ordinal, interval, and ratio. The most basic type is the nominal scale, which divides data into groups without implying a true zero, rank, or interval spacing (Idika et al., 2023). In other words, objects in a nominal scale are categorized into classes based on their equivalence. As a result, a nominal scale has been used in this study to measure questions such as gender and ethnicity.

Ordinal scale provides more information and a higher measurement level than nominal scales, since they show a systematic order among variable

observations (Taylor, 2024). The interval scale is applied when variables have regular gaps between values. In this study, the respondents' ages and independent variables were measured using an ordinal scale. The five fundamental measures on the Likert scale are from (1) Strongly Disagree to (5) Strongly Agree.

3.4 Pilot Test

Pilot test was conducted to check if questionnaire items were comprehensive, clear, and matching with the study objectives. Hence, pilot testing is essential for identifying errors in the survey or research procedure and for estimating the time and resources required to carry out the main study. Bujang et al. (2024) stated that a pilot test must have at least 30 responders.

3.5 Data Processing, Checking, Editing, and Coding

Data processing involves gathering data and converting it into a usable format. The main goal of data processing is to turn data to a manageable format. Hence, the data is cleaned, checked, coded, and recorded for further use during this period.

Data checking is a crucial step in discovering and fixing any missing information that may affect test reliability. It is carried out to make sure the questionnaires delivered to the target respondents are correct and relevant for the study. These checks include recognizing empty or missing values, confirming that required fields are filled out, detecting duplicate entries, applying consistent style, and verifying the data's timeliness. Data quality is essential since it has a significant impact on the reliability and correctness of the information used to make decisions (Suer, 2023).

Data editing is the process of examining data to identify items that might be inaccurate, missing, or incomplete (Kumar, 2023). After this process, researchers may be confident that their findings are supported by reliable, consistent, and

applicable data. Fortunately, there were no errors, unreasonable answers, or omissions in any of the 200 surveys used in this study. Therefore, no additional data editing was required.

Data coding is the process that helps researchers identify concepts, relationships, and trends by organizing raw data into a more logical format (Somasundaram, 2023). By assigning and labeling codes, data coding helps to arrange data or information into logical and relevant categories.

3.6 Data Analysis

This study uses Smart PLS and SPSS for data analysis. Descriptive analysis and inferential analysis are used in this study. A robust statistical modeling method called Partial Least Squares Structural Equation Modeling (PLS-SEM) is used by Smart PLS (Wong, 2013). According to Vinzi (2010), PLS is a variation of structural equation modeling that is unaffected by predetermined assumptions on the distribution of data. In management science, Smart PLS can manage complex models with moderators and mediators, even when the data is unusual or the samples are tiny. In addition, Statistical Package for the Social Sciences (SPSS) is a widely used program for performing quantitative data analysis (Rahman & Muktadir, 2021). It was first created at Stanford University in 1968 by Norman H. Nie, Dale H. Bent, and C. Hadlai Hull (McCormick et al., 2016). Researchers can work efficiently with SPSS without requiring programming knowledge due to its simple user experience. It is widely used in sectors such as sociology, psychology, business, economics, medical, education, and marketing as it can handle, analyze, and present huge quantities of data. Based on Vorhies (2017), marketing and research groups can use SPSS as an efficient tool to examine customer behavior and forecast future trends. Hence, this software is suitable for this study.

3.6.1 Descriptive Analysis

Descriptive analysis is a statistical technique used to arrange, summarize, and present data adequately (Rawat, 2021). Researchers frequently use cross-tabulations to test various hypotheses, evaluate variation using variance or standard deviation, and construct tables with values and percentages. Descriptive analysis tools like bar charts, pie charts, or graphical histograms have been used to show the demographic profile of the participants in Section A. As a result, it helps to interpret the data set, thus providing a clear overview in this study.

3.6.2 Inferential Analysis

Reliability test, diagnostic test, Pearson Correlation Analysis, and multiple linear regression will be test in this study.

Table 3.6.2.1 Cronbach's Alpha Coefficient Range

Coefficient Range	Strength of Association
< 0.6	Unacceptable
0.6 to < 0.7	Moderate
0.7 < 0.8	Good
0.8 to < 0.9	Very good
> 0.9	Excellent

Source: Streiner, D. L. (2003). Starting at the beginning: an introduction to coefficient alpha and internal consistency. *Journal of personality assessment*, 80(1), 99-103.

Regression analysis is conducted to explore the connections between variables. Table 3.6.2.1 shows that this study uses reliability coefficients, like Cronbach's alpha, to evaluate the internal consistency of the tool. In this study, reliability was assessed using Cronbach's alpha, where a value greater than 0.70 indicates that the items were reliable (Sykes, 1993).

Moreover, diagnostic tests were conducted before regression analysis to ensure the normality of the data. Diagnostic tests include the Variance Inflation Factor (VIF) and heteroscedasticity. VIF determines if a variable in the model has a high correlation with another (Potters, 2024). VIF helps statisticians and researchers examine complex datasets, detect any issues in their models, verify their findings, and prevent errors. Kumar (2023) stated that heteroscedasticity in regression analysis refers to a situation where the values of an independent variable affect the residuals or error terms.

Table 3.6.2.2 Pearson Correlation Coefficient Range

Scale of Correlation Coefficient	Value
0 - 0.19	Very Low
0.2 - 0.39	Low
0.4 - 0.59	Moderate
0.6 - 0.79	High
0.8 - 1.0	Very high

Source: Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: appropriate use and interpretation. *Anesthesia & analgesia*, 126(5), 1763-1768.

Table 3.6.2.2 shows that Pearson correlation analysis is carried out to check the strength of a linear relationship between two independent variables. Pearson correlation analysis, also known as r , is measured on a scale of -1 or +1 (Yang et al., 2021). When one variable changes, the other also changes in the same way.

Multiple linear regression is a statistical method that uses two or more predictors to predict the value of one element (Bevans, 2023). It can occur when two or more independent variables have a linear relationship with the dependent variable. Nevertheless, if the relationship is not linear, it might potentially adopt a non-linear shape (Taylor, 2024). By using this model, it is easier to see the direct and indirect effects of loyalty programs on consumer loyalty.

The formula of Multiple Linear Regression:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6$$

$$Y = a + b_1CS + b_2CT + b_3CE + b_4SN + b_5ATT + b_6PBC$$

Where:

Y = Customer Loyalty

a = Intercept (constant term)

B_i = Coefficient of Variables, where i=1,2, 3...

X_i =Independent variables, where i = 1, 2, 3....

CS =Customer Satisfaction

CT =Customer Trust

CE =Customer Engagement

SN =Subjective Norm

ATT =Attitude

PBC =Perceived Behavioral Control

3.7 Conclusion

In this chapter, the methodology adopted has been discussed. It also covers the various types of research and provides the results and analysis proposed in this study. The following chapter will examine the data collection process and the questionnaire's results.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

This chapter presents the study's data analysis, such as descriptive analysis, reliability analysis, and inferential analysis. The descriptive data summarizes the demographic profile of respondents, and reliability tests are used to ensure that all measurement scales are consistent. Inferential tests include Pearson Correlation Analysis and multiple linear regression.

4.1 Pilot Test

4.1.1 Reliability Test

Table 4.1.1 Summary of Reliability Statistics

Variables	Cronbach Alpha Value	No. of Item
Customer Loyalty	0.839	3
Customer Satisfaction	0.877	4
Customer Trust	0.935	11
Customer Engagement	0.955	9
Subjective Norm	0.902	3
Attitude	0.843	3
Perceived Behavioral Control	0.705	3
Purchase Intention	0.828	3
Behavior	0.843	3

Source: Data from SPSS.

Adamson and Prion (2023) stated that the results for Cronbach's alpha value should be more than 0.6. Hence, Table 4.2.1 shows that all the Cronbach's alpha values in the pilot test are above 0.7, and the results are reliable.

4.1.2 Regression Analysis

Table 4.1.2 Summary of Regression Results

Variables	Coefficient Value	
	Model 1 (Based on SET)	Model 2 (Based on TPB)
(Constant)	-0.131	0.231
Customer Satisfaction	0.183	
Customer Trust	1.003*	
Customer Engagement	-0.131	
Subjective Norm		-0.119
Attitude		0.129
Perceived Behavioral Control		0.645*
R square	.780	.677
F statistic	30.794	12.590
Sig.	<.001 ^b	<.001 ^b

* = significant at the 1% level ($p < 0.01$)

Source: Data from SPSS.

Two models will be tested in the pilot test. Model 1 is based on Social Exchange Theory, which includes customer satisfaction, customer trust, and customer engagement. Model 2 is according to the Theory of Planned Behavior, which consists of subjective norm, attitude, and perceived behavioral control. According to Table 4.1.2, customer trust has a p-value less than 0.01, thus it can influence customer loyalty significantly. Customer satisfaction and customer engagement both have a p-value greater than 0.10. Therefore, in this pilot test, customer trust had a higher influence on university students' loyalty rather than satisfaction or engagement.

4.2 Descriptive Analysis

Descriptive analysis used to define and measure the characteristics and strengths of elements. It helps to organize, condense, and present data easily and concisely (Kemp et al., 2018).

4.2.1 Demographic Profile

Table 4.2.1 Summary of Respondent Profiles

Category	Type	No. of Respondents	Percentages (%)
Gender	Male	79	36.2
	Female	139	63.8
Age	18-20	22	10.1
	21-25	190	87.2
	26-30	5	2.3
	Above 30	1	1
Ethnicity	Malay	18	8.3
	Chinese	195	89.4
	Indian	5	2.3
Type of University	Public	42	19.3
	Private	176	80.7
Frequency of buying beverages in one week	0-2 times	103	47.2
	3-5 times	106	48.6
	6-8 times	4	1.8
	Above 8 times	5	2.3
Mode of purchasing beverages	Walk-in to shops/ Dine-in	112	51.4
	Takeaway	33	15.1
	Online purchase	26	11.9
	In-apps purchases	47	21.6
	Others	0	0
Are you aware of the beverage loyalty program(s)?	Yes	194	89
	No	24	11
How many times do you use mobile applications to buy beverages in one week?	0-2 times	141	64.7
	3-5 times	74	33.9
	6-8 times	1	0.5
	Above 8 times	2	0.9
How long (in years) have you been a member?	Less than 1 year	69	31.7
	2-4 years	133	61
	5-7 years	14	6.4
	Above 7 years	2	0.9
How often do you use the loyalty program benefits? (per week)	0-1times	10	4.6
	2-3 times	32	14.7
	4-5 times	61	28
	6-7 times	79	36.2
	Above 7 times	36	16.5
What type of rewards do you find most appealing in a loyalty program?	Discounts	116	53.2
	Free products	31	14.2
	Points-based systems	42	19.3
	Exclusive offers or promotions	29	13.3
	Other	0	0
Have you ever shared a loyalty program promotion with your friends or on social media?	Yes	173	79.4
	No	45	20.6

Source: Data from SPSS.

According to the results, 79 out of 218 (36.2%) were males, while 139 out of 218 (63.8%) were females. This shows that females are more responsive to this survey, indicating a higher percentage of female participation in purchasing beverages through loyalty programs.

The results show that 22 (10.1%) out of 218 were between 18 to 20 years old while 190 respondents (87.2%) were between 21 and 25 years old. Besides that, 5 respondents or 2.3% were between 26 and 30 years old, while 1 respondent or 0.5% are between 26 and 30 years old.

Moreover, the results show that most of the respondents are Chinese, who represent 195 out of 218 (89.4%). Next, 18 out of 218 (8.3%) of Malay respondents, and the remaining 5 respondents (2.3%) are Indian.

Based on the results, 176 respondents, or 80.7% were from private universities, such as Universiti Tunku Abdul Rahman, Sunway University, and Taylor's University. Moreover, 42 out of 218 respondents, which represents 19.3% of the sample studied at public universities such as Universiti Malaya, Universiti Kebangsaan Malaysia, and Universiti Sains Malaysia.

The results show that 103 out of 218 respondents (47.2%) purchase beverages less than 2 times in a week. Besides, 106 out of 218 respondents (48.6%) purchase beverages 3-5 times in a week. 4 respondents (1.8%) purchase beverages 6-8 times in a week, and the remaining 5 respondents purchase beverages more than eight times, which represents 2.3%.

According to the results, 112 out of 218 respondents prefer to buy their beverages in the shop, which represents 51.4%, and 47 respondents (21.6%) prefer in-app purchases. There are 33 out of respondents (15.1%) choose to take their beverages away while 26 respondents (11.9%) who buy their beverages through online platforms such as Grab Food, Food Panda, and Shopee Food.

More than half of respondents are aware of the beverage loyalty program, which is represented by 194 out of 218 (89%). 24 respondents (11%) were unfamiliar with the beverage loyalty program. This suggests that young customers are typically aware of and regularly participate in loyalty programs.

The results indicate that 141 out of 218 respondents (64.7) reported that they use mobile applications less than 2 times to buy beverages in one week. Next, 74 out of 218 respondents (33.9) use 3 to 5 times mobile applications to buy beverages in one week. There are only 1 respondent (0.5%) who use 6-8 times, and the remaining 2 respondent (0.5%) uses above 8 times in a week.

Based on the survey results, the most common loyalty programme is Starbucks Rewards, represented by 99 respondents (45.4%). 59 or 27.1% respondents a member of Tealive Rewards, and 12 respondents (5.5%) are the members of Boost Juice VIBE Club. The remaining 48 respondents (22%) prefer other beverage loyalty programs such as Chagee Mini Program and Zus App.

The results show that 133 or 61% of 218 respondents have been members of the loyalty program for two to four years. The following is that 69 or 31.7% of respondents have been members for less than one year. There are only 14 or 6.4% respondents who have joined five to seven years ago, and the remaining 2 respondents (0.9%) joined over seven years ago.

The survey results show that 79 or 36.2% of respondents use the loyalty program benefits six to seven times a week. 61 out of 218 respondents (28%) use four to five times a week. There are 36 respondents (16.5%) who often use the loyalty program benefits, which are above seven times a week, and 32 respondents (14.7%) only use loyalty program benefits two to three times. The lesser option is 10 or 4.6% respondents who use less than once times in a week.

Most of the respondents, 116 out of 218 (53.2%) prefer discounts in the loyalty program. Next, 42 respondents (19.3%) found that point-based systems, such as every point for every purchase, were the most appealing in a loyalty program. 31 or 14.2% of respondents would prefer free products, such as a free drink after 10 purchases. The remaining 29 respondents (13.3%) were interested in exclusive offers or promotions.

Besides, 173 out of 218 respondents (79.4%) reported that they have shared a loyalty program promotion with their friends or on social media, while 45 or 20.6% respondents have not shared. This shows that most of the customers are willing to share the loyalty program benefits with their friends or family.

4.3 Inferential Analysis

4.3.1 Pearson Correlation Analysis

Table 4.3.1 Pearson Correlation Analysis

		CL	CS	CT	CE	SN	ATT	PBC
CL	Pearson Correlation	1	.678***	.589***	.477***	.451***	.546***	.484**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001	<.001
	N		218	218	218	218	218	218
CS	Pearson Correlation		1	.709***	.496***	.384***	.558***	.595**
	Sig. (2-tailed)			<.001	<.001	<.001	<.001	<.001
	N			218	218	218	218	218
CT	Pearson Correlation			1	.650***	.562***	.640***	.627**
	Sig. (2-tailed)				<.001	<.001	<.001	<.001
	N				218	218	218	218
CE	Pearson Correlation				1	.695***	.533***	.528**
	Sig. (2-tailed)					<.001	<.001	<.001
	N					218	218	218
SN	Pearson Correlation					1	.401***	.493**
	Sig. (2-tailed)						<.001	<.001
	N						218	218

ATT	Pearson	1	.508*
	Correlation		**
	Sig. (2-tailed)		<.001
	N		218
PBC	Pearson		1
	Correlation		
	Sig. (2-tailed)		
	N		
***	= significant at the 10% level ($p < 0.10$)		
<u>Source:</u> Data from SPSS.			

According to Table 4.3.1, there is a positive and significant correlation between all independent variables with a significant p-value with customer loyalty. As Pearson correlation coefficients range from -1 to +1, values close to +1 indicate a significant positive relationship between the variables (Liu, 2019). Therefore, the results show that customer satisfaction has the strongest positive relationship with customer loyalty, with a correlation value of 0.678. Customer trust has a correlation coefficient of 0.589 and can significantly influence customer loyalty. Furthermore, there is a positive correlation between customer engagement and customer loyalty with a value of 0.477. Subjective norm and attitude can significantly influence customer loyalty at value of 0.451 and 0.546. Lastly, perceived behavioral control has a positive correlation with customer loyalty, with a coefficient value of 0.484.

4.3.2 Reliability Test

This study used Cronbach's Alpha value to evaluate the internal consistency of each measurement item. Stronger internal consistency is shown by a higher alpha value (Edelsbrunner et al., 2025). This indicates that the scale's items are more aligned with one another and offer accurate measurements for analysis.

Table 4.3.2 Summary of Reliability Statistics

Variables	Cronbach Alpha Value	No. of Item
Customer Loyalty	0.762	3
Customer Satisfaction	0.813	4
Customer Trust	0.902	11
Customer Engagement	0.898	9
Subjective Norm	0.816	3
Attitude	0.703	3
Perceived Behavioral Control	0.565	3

Source: Data from SPSS.

According to Adamson and Prion (2023), Cronbach's alpha score between 0.6 and 0.7 indicates a moderate level of consistency, showing that the results are acceptable, while values of 0.8 or above indicate a high level of internal consistency. Hence, the Cronbach's Alpha scores for every variable in this study were higher than the suggested minimum score of 0.60, showing that each scale's items have sufficient internal consistency. This study uses three questions to study the dependent variable, customer loyalty, by using a 5-point Likert scale. By using SPSS software, the reliability analysis showed that Cronbach's alpha value for this variable is 0.762, which is within the very good range. Moreover, 4 questions were examined to test the independent variable, customer satisfaction. This variable gets a Cronbach's alpha of 0.813, which is also within a range of very good reliability. Furthermore, 11 questions were used to study customer trust and get a Cronbach's alpha of 0.902. This section is considered an excellent range, which highlights that the items are highly consistent and accurate.

On top of that, the Likert scale is also used to study customer engagement and consists of 9 questions. After running through the software, this variable has a Cronbach's alpha of 0.898, which demonstrates excellent internal consistency and high dependability. Subjective norm consists of 3 questions, has also been tested by using the Likert scale. This variable gets a Cronbach's alpha of 0.816, which is under the good range. Besides that, 3 questions were examined to study the attitude of the customer. It gets a Cronbach's alpha value of 0.703, which under the good range. Lastly, three

questions were analysed by using the Likert scale to study the last independent variable, perceived behavioral control. This section consists of 3 questions and has a Cronbach's alpha value of 0.565. Hence, the results proved that all the measuring scales used in this study have sufficient reliability.

4.4 Diagnosis Test

4.4.1 Variance Inflation Factor, Skewness, and Kurtosis

Table 4.4.1 Diagnosis Test

Variables	VIF	Skewness	Kurtosis
Customer Satisfaction	2.251	-2.321	7.821
Customer Trust	3.115	-2.269	10.195
Customer Engagement	2.501	-1.782	3.903
Subjective Norm	2.083	-1.787	4.237
Attitude	1.850	-2.189	8.483
Perceived Behavioral Control	1.920	-1.928	7.852

Source: Data from SPSS.

Variance Inflation Factor (VIF) is a tool used in statistical software to detect irregularities in data. According to Akinwande et al. (2015), value between 1 and 5 indicate moderate correlation, while values above 5 to 10 indicates a high level of multicollinearity. Therefore, Table 4.4.2 shows that there is no multicollinearity problem, and the regression results are reliable. On top of that, this study used the skewness and kurtosis tests to evaluate the normality of the data distribution. Skewness indicates the symmetric of a data set by showing whether the distribution is symmetrical, balanced, or shifted to the left or right. Skewness values between -2 and +2 are acceptable, while skewness values between -1 and +1 are considered excellent (Hair et al., 2015). In this study, every variable has a skewness between -1 and +1, thus shows the data is good. Furthermore, Kurtosis evaluates normality by indicating whether the distribution is smoother or more peaked than a

typical distribution. Kurtosis levels between 7 and +7 are acceptable (Kim, 2013). According to table 4.4.1, although the kurtosis values for customer trust (10.195) and attitude (8.483) has exceed the suggested ± 7 limit, these two variables do not significantly change the normality assumption (Schmidt & Finan, 2018). Customer satisfaction, customer engagement, subjective norm, and perceived behavioral control all fall within the acceptable 7 to +7 range. Hence, there are no significant deviations from normality in this study.

4.5 Regression Analysis

4.5.1 Multiple Linear Regression: Model 1

Table 4.5.1 Summary of Regression Analysis

Variables	Model 1	P-Value
Constant	0.410	
Customer Satisfaction	0.538	<0.001*
Customer Trust	0.031	0.763
Customer Engagement	-0.006	0.931
Subjective Norm	0.155	0.009*
Attitude	0.200	0.003*
Perceived Behavioral Control	-0.009	0.908
R square	0.528	
F statistic	39.282	
Sig.	<.001 ^b	

* Indicates significance at the 1% level ($p < 0.01$)

Source: Data from SPSS.

Multiple linear regression is used to examine the combined effects of various independent variables on a single dependent variable (Alita et al., 2021). There are three models in this regression analysis, where Model 1 is merged with all the variables in Model 2 and Model 3 into a complete regression model. Table 4.3.4.1 shows that Model 1 includes all six independent variables, including customer satisfaction, customer trust, customer engagement, subjective norm, attitude, and perceived behavioral control. In model 1, customer satisfaction has a significant p-value of less

than 0.01, showing that customer satisfaction can influence customer loyalty significantly. In addition, subjective norms have a significant p-value of 0.009. Attitude has a significant p-value of 0.003 and indicates that it can significantly influence customer loyalty. Customer trust, customer engagement, and perceived behavioral control have a p-value greater than 0.10, thus these variables could not significantly influence customer loyalty. The six variables have the r square value of 0.528, thus can explain 52.8% of the variation of customer loyalty. Moreover, this model has a F-statistic value of 39.828, proving that the six variables strongly contribute to influence customer loyalty.

The formula of the Multiple Linear Regression of Model 1 is shown below:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + B_6X_6$$

$$Y = 0.410 + 0.538CS + 0.031CT - 0.006CE + 0.155SN + 0.200ATT - 0.009PBC$$

Where:

Y	= Customer Loyalty
a	= Intercept (constant term)
B _i	= Coefficient of Variables, where i=1,2, 3...
X _i	=Independent variables, where i = 1, 2, 3....
CS	=Customer Satisfaction
CT	=Customer Trust
CE	=Customer Engagement
SN	=Subjective Norm
ATT	=Attitude
PBC	=Perceived Behavioral Control

4.5.2 Multiple Linear Regression: Model 2

Table 4.5.2 Summary of Regression Results

Variables	Model 2	P-Value
Constant	0.649	
Customer Satisfaction	0.562	<0.001*
Customer Trust	0.170	0.083***
Customer Engagement	0.120	0.0418**
R square	0.494	
F statistic	69.510	
Sig.	<.001 ^b	
* Indicates significance at the 1% level (p < 0.01)		
*** Indicates significance at the 5% level (p<0.05)		
*** Indicates significance at the 10% level (p<0.10)		

Source: Data from SPSS.

Model 2 is based on Social Exchange Theory, which focuses on three independent variables such as customer satisfaction, customer trust, and customer engagement. The result shows that these three variables all have a significant p-value, which can contribute together to influence the dependent variable, customer loyalty. The correlation between these three variables is 0.494, which reflects 49.4% of the variation of customer loyalty. The F-statistic value of this model is 69.510.

The formula of the Multiple Linear Regression of Model 2 is shown below:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3$$

$$Y = 0.649 + 0.562CS + 0.170CT + 0.120CE$$

Where:

- Y = Customer Loyalty
- a = Intercept (constant term)
- B_i = Coefficient of Variables, where i=1,2, 3...
- X_i =Independent variables, where i = 1, 2, 3....
- CS =Customer Satisfaction
- CT =Customer Trust
- CE =Customer Engagement

4.5.3 Multiple Linear Regression: Model 3

Table 4.5.3 Summary of Regression Results

Variables	Model 3	P-Value
Constant	0.963	
Subjective Norm	0.180	0.001*
Attitude	0.382	<0.001*
Perceived Behavioral Control	0.224	0.004*
R square	0.387	
F statistic	45.096	
Sig.	<.001 ^b	

* Indicates significance at the **1% level (p < 0.01)**

Source: Data from SPSS.

According to the Theory of Planned Behavior, Model 3 consists of three independent variables such as subjective norm, attitude, and perceived behavioral control. All the variables have a significant p-value, showing that they can influence customer loyalty. Furthermore, this model has a r square value of 0.387, which can explain the variation of 38.7% of customer loyalty. Lastly, Model 3 has the F-statistics of 45.096.

The formula of the Multiple Linear Regression is shown below:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3$$

$$Y = 0.963 + 0.180SN + 0.382ATT + 0.224PBC$$

Where:

- Y = Customer Loyalty
- a = Intercept (constant term)
- B_i = Coefficient of Variables, where i=1,2, 3...
- X_i =Independent variables, where i = 1, 2, 3....
- SN =Subjective Norm
- ATT =Attitude
- PBC =Perceived Behavioral Control

4.6 Conclusion

This chapter outlined the analysis results, along with descriptive statistics, reliability test, and inferential test. The correlation and regression results proved that all the variables were significantly connected. Pearson correlation analysis has identified a positive relationship between the independent variables and the dependent variable. Multiple linear regression proved that these variables have a significant impact on customer loyalty. Therefore, the statistical results offer a solid framework for the analysis.

CHAPTER 5: DISCUSSIONS, CONCLUSIONS, AND IMPLICATIONS

5.0 Introduction

This chapter summarized the study's key findings including its limitations, practical implications, and conclusions on the hypothesis. This chapter will also provide the suggestions for further study.

5.1 Discussion of Major Findings

5.1.1 Findings on Hypothesis

Table 5.1.1 Findings on Hypothesis

Hypothesis	Variable	P-value	Findings	Relationship
H1	There is a significant relationship between customer satisfaction and customer loyalty on loyalty programs among university students in the food and beverage industry in Malaysia.	<0.001	Supported	Significant
H2	There is no significant relationship between customer trust and customer loyalty toward loyalty programs in the food	0.763	Not Supported	Not Significant

	and beverage industry in Malaysia.			
H3	There is no significant relationship between customer engagement and customer loyalty toward loyalty programs in the food and beverage industry in Malaysia.	0.931	Not Supported	Not Significant
H4	There is a significant relationship between subjective norm and customer loyalty toward loyalty programs in the food and beverage industry in Malaysia.	0.009	Supported	Significant
H5	There is a significant relationship between attitude and customer loyalty toward loyalty programs in the food and beverage industry in Malaysia.	0.003	Supported	Significant
H6	There is no significant relationship between perceived behavioral control and customer loyalty toward loyalty programs in the food and beverage industry in Malaysia.	0.908	Not Supported	Not Significant

Source: Developed for research.

The regression analysis showed that customer satisfaction can influence customer loyalty toward loyalty programs in the food and beverage industry. According to the results, university students are more likely to remain with the F&B companies once they are satisfied with the customer service, quality of the goods, and loyalty program offerings. Therefore, this result is aligned with the findings of Kim (2024), who emphasized satisfaction as a key factor in determining loyalty in F&B contents and Sung et al. (2021), who determined that higher satisfaction levels motivate students to make further visits to the shops. Hence, H1 is supported.

The results suggests that customer trust is not significantly influenced on consumer loyalty. This finding indicates that trust is not sufficient to foster consistent loyalty behavior among university students in the context of loyalty programs. When deciding to remain with a particular food and beverage companies, university students might give higher priority to features like rewards, convenience, cost, or social influence over trust. Thus, H2 is not supported.

The finding demonstrates that among university students, customer engagement is not equal to consistent loyalty. Although university students may engage with company activities, this does not result in ongoing involvement. Without important elements like rewards or attractive incentives, engagement is insufficient to sustain loyalty. H3 is therefore not supported.

The findings support H4 by showing that subjective norm plays a major role in fostering customer loyalty. When their friends or peers, or social groups, support, recommend, and engage in the same loyalty programs, students are more likely to be loyal. This result is consistent with the studies by Pai et al. (2024) and Izquierdo-Yusta et al. (2022), which found that there is a positive relationship between subjective norm and customer loyalty toward loyalty programs in the food and beverage industry.

The study's results support H5, indicating that university students' attitudes had a positive effect on their customer loyalty toward loyalty programs. Students are likely to participate in the loyalty program and remain with the company if they have a positive view of it and believe it is useful, enjoyable, or valuable. This result indicated that good attitudes about the company directly increase customer loyalty. Hence, attitude can influence customer loyalty in this context.

The findings support hypothesis H6, demonstrating that students are more committed when they believe the loyalty program is simple to utilize, redemption procedures are clear, and food and beverage establishments are easy to find. This makes them more likely to remain with the brand and keep using the loyalty program. As a result, greater perceived control results in stronger customer loyalty in convenience-based service contexts.

This suggests that customer loyalty is not significantly influenced by perceived behavioral control. Based on the results, university students need more than just a simple and straightforward loyalty programs to develop loyalty. Even if the loyalty program is easy to use, students may still switch brands, demonstrating that other elements like promotions, rewards, or social influence are more important in sustaining customer loyalty. Therefore, H6 is not supported.

5.2 Implications of the Study

The study provides useful data for both consumers and food and beverage (F&B) companies, especially university students who make up a large, powerful, and proactive market. By recognizing how customer loyalty is shaped by satisfaction, trust, engagement, subjective norm, attitude, and perceived behavioral control, businesses can create more successful loyalty programs. At the same time, students can gain from lower costs and overall service quality. From a business perspective, the results highlight the necessity of creating loyalty programs that are effective,

easy to use, and attractive to university students. For instance, F&B businesses must ensure stable product quality, accurate orders, and enjoyable service experiences as consumer satisfaction is a key factor in building loyalty. To establish customer trust, the companies should communicate clearly about the reward termination, redemption policies, and promotional terms to avoid inaccurate details or hidden fees. In addition, companies must involve interactive elements, such as competitive rewards, missions, and customized offers, to encourage customers' engagement. Furthermore, food and beverage companies must provide loyalty programs that can connect with customers' social groups through group-based promotions, referral rewards, and collaborations with student organizations. For instance, Zus Coffee can offer a "Buy 2 drinks and get one free when you come with your friends", thus encouraging students to participate together with their friends. Companies should also implement user-friendly applications, simple redemption, and a wide range of purchase channels to enhance perceived behavioral control. Together, companies can develop successful loyalty programs and further promote repeat purchases and strong customer loyalty.

From the customer's point of view, university students can benefit well from effective loyalty programs as they enhance the quality, flexibility, and purchasing experiences. For example, students can enjoy offers, rebates, and customized rewards that minimize costs, especially for everyday necessities such as coffee. Customer trust is also increased by consistent product quality and simple program policies, which foster a trustworthy and positive purchasing environment. Besides that, students are encouraged to interact with companies while having fun with friends through interactive features and social-sharing components. Meanwhile, students have more control over mobile applications, which makes it easier to earn, track, and redeem rewards. In a nutshell, food and beverage companies can improve their competitive position, boost customer loyalty, and build long-term relationships with university students by implementing those findings. At the same time, customers can increase their convenience, satisfaction, and confidence in their purchasing experience.

5.3 Limitations of the Study

This study has some limitations, although it provides insightful insights into how loyalty programs influence university students' customer loyalty. First, most of the responders were between 21 and 25 years old, even though the targeted sample ranged from 18 to 30 years old and above. Hence, the results are inapplicable to every university student, who might have different spending habits, financial restrictions, and opinions on loyalty programs (Backwell & Mitchell, 2003). As a result, the findings most reflect the opinions and actions of students in their early twenties.

Second, the study has a geographical limitation since many respondents came from the same universities in Malaysia. For example, students from East Malaysia, smaller campuses, or universities with different characteristics, may not be accurately reflected by this limited geographic area (Hair et al., 2019). Additionally, the accessibility of digital services, exposure to promotions, and access to food and beverage businesses might differ among students in different areas. This limitation will affect their loyalty behavior and involvement in loyalty programs.

Lastly, this study only focuses on the food and beverage (F&B) industry, which can restrict the findings' applicability to other sectors. For instance, reward systems, consumer motivations, and engagement strategies may differ across loyalty programs in industries such as retail, hospitality, and e-commerce. Hence, the results can only be interpreted in the context of F&B loyalty programs among university students, as loyalty program designs and customer behaviors in other industries might be different.

5.4 Recommendation for Future Research

The following recommendations are offered to guide future research since there are some limitations in this study. As most of the respondents in this study are between 21-25 years old, the viewpoints of younger students or older students may not be

fully captured. To accurately reflect the target population, future studies can adopt quota sampling, which allows the researcher to determine the right proportion of participants from each age category. Therefore, future studies can improve demographic accuracy, reduce sampling bias, and produce a complete overview of how loyalty programs impact university students from different age groups.

In addition, future studies could expand their geographic range by involving university students from a wider range of locations, including smaller campuses, East Malaysia, and diverse universities with different backgrounds and profiles. For instance, students' participation in loyalty programs may be affected by local variations in access to food and beverage outlets, their accessibility to digital services, and involvement in promotions. Hence, future research can boost the sample's representativeness and deliver a more precise understanding by including respondents from a variety of geographic locations.

Furthermore, future studies could expand the area of study by examining loyalty programs in sectors beyond food and beverage, such as retail, hospitality, transportation, or e-commerce. For example, the retail or e-commerce sector could focus on point accumulation, and the hotel might prioritize tiered memberships or exclusive benefits. Moreover, researchers can determine whether important factors such as satisfaction, trust, or engagement are the same in every industry or vary depending on their unique features by looking at loyalty programs in different sectors. This comparative research can provide deeper insights into how customers engage with and react to loyalty programs in other contexts.

5.5 Conclusion

This chapter examined the main conclusions of the hypothesis testing and discussed the beneficial implications for both customers and companies. The research has proved that six independent variables, customer satisfaction, customer trust, customer engagement, subjective norm, attitude, and perceived behavioral control, can shape customer loyalty through the influence of loyalty programs.

REFERENCES

- Abd Ghani, M., Rahi, S., Yasin, N. M., & Alnaser, F. M. (2017). Adoption of internet banking: extending the role of technology acceptance model (TAM) with e-customer service and customer satisfaction. *World Applied Sciences Journal*, 35(9), 1918-1929. <http://dx.doi.org/10.5829/idosi.wasj.2017.1918.1929>
- Adamson, K. A., & Prion, S. (2023). Reliability: Measuring Internal Consistency Using Cronbach's α . *Clinical Simulation in Nursing*, 9(5), e179–e180. <https://doi.org/10.1016/j.ecns.2012.12.001>
- Agrawal, R., Gaur, S. S., & Narayanan, A. (2012). Determining customer loyalty: Review and model. *The marketing review*, 12(3), 275-289. <https://doi.org/10.1362/146934712X13420906885430>
- Ahmad, R., Nawaz, M. R., Ishaq, M. I., Khan, M. M., & Ashraf, H. A. (2023). Social exchange theory: Systematic review and future directions. *Frontiers in psychology*, 13, 1015921.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-t](https://doi.org/10.1016/0749-5978(91)90020-t)
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1. *Journal of applied social psychology*, 32(4), 665-683. <https://doi.org/10.1111/j.1559-1816.2002.tb00236.x>
- Ajzen, I., Fishbein, M., Lohmann, S., & Albarracín, D. (2018). The influence of attitudes on behavior. *The handbook of attitudes, volume 1: Basic principles*, 197-255.
- Akhgari, M., & Bruning, E. R. (2024). How attitudes translate to loyalty: An integrative model in service relationship marketing. *Journal of Relationship Marketing*, 23(4), 356-391. <https://doi.org/10.1080/15332667.2024.2368323>
- Akinwande, M. O., Dikko, H. G., & Samson, A. (2015). Variance Inflation Factor: As a Condition for the Inclusion of Suppressor Variable(s) in Regression Analysis. *Open Journal of Statistics*, 5(7), 754–767. <https://doi.org/10.4236/ojs.2015.57075>
- Akter, N., & Hasan, S. (2023). The moderating role of perceived behavioral control in predicting Muslim tourists' halal tourism intention: a developing country perspective. *Journal of Islamic Marketing*, 14(7), 1744-1767. <https://doi.org/10.1108/jima-10-2021-0336>
- Alex, D. (2024, November 28). *What is Non-Probability Sampling? Methods, Types, and Examples* | Researcher.Life. [Researcher.life. https://researcher.life/blog/article/what-is-non-probability-sampling-methods-types-and-examples/](https://researcher.life/blog/article/what-is-non-probability-sampling-methods-types-and-examples/)

- Ali, S. (2018). Impact Of Consumer Relationship Management On Consumer Satisfaction, Loyalty Programs And Customer Retention In Bankikng Sector Of Pakistan. *Arabian Journal of Business and Management Review (Oman Chapter)*, 7(2), 9-21. <https://doi.org/10.12816/0046980>
- Alita, D., Putra, A. D., & Darwis, D. (2021). Analysis of classic assumption test and multiple linear regression coefficient test for employee structural office recommendation. *IJCCS (Indonesian Journal of Computing and Cybernetics Systems)*, 15(3), 295–306. <https://doi.org/10.22146/ijccs.65586>
- Allen, I. E., & Seaman, C. A. (2007). Likert scales and data analyses. *Quality progress*, 40(7), 64-65.
- Arain, M., Campbell, M. J., Cooper, C. L., & Lancaster, G. A. (2010). What is a pilot or feasibility study? A review of current practice and editorial policy. *BMC medical research methodology*, 10(1), 67. <https://doi.org/10.1186/1471-2288-10-67>
- Bagaskara, A. S., & Sigit, M. (2019, March 1). *An analysis on the influence of customer loyalty program and service quality on customer loyalty with trust as a mediation variable on Samsung mobile phone*. Wwww.atlantis-Press.com; Atlantis Press. <https://doi.org/10.2991/insyma-19.2019.28>
- Bandyopadhyay, S., & Martell, M. (2007). Does attitudinal loyalty influence behavioral loyalty? A theoretical and empirical study. *Journal of retailing and consumer services*, 14(1), 35-44. <https://doi.org/10.1016/j.jretconser.2006.03.002>
- Barari, M., Ross, M., Thaichon, S., & Surachartkumtonkun, J. (2021). A meta-analysis of customer engagement behaviour. *International Journal of Consumer Studies*, 45(4), 457-477. <https://doi.org/10.1111/ijcs.12609>
- Best, S. J., & Krueger, B. S. (2006). Online interactions and social capital: Distinguishing between new and existing ties. *Social science computer review*, 24(4), 395-410. <https://doi.org/10.1177/0894439306286855>
- Borgatta, E. F., & Bohrnstedt, G. W. (1980). Level of measurement: Once over again. *Sociological Methods & Research*, 9(2), 147-160. <https://doi.org/10.1177/004912418000900202>
- Brookes, E. (2023). The theory of Planned Behavior: behavioral intention. *Simply Psychol*, 438-59.
- Bujang, M. A., Omar, E. D., Foo, D. H. P., & Hon, Y. K. (2024). Sample size determination for conducting a pilot study to assess reliability of a questionnaire. *Restorative dentistry & endodontics*, 49(1). <https://doi.org/10.5395/rde.2024.49.e3>
- Busalim, A. H., Hussin, A. R. C., & Iahad, N. A. (2019). Factors influencing customer engagement in social commerce websites: A systematic literature

- review. *Journal of theoretical and applied electronic commerce research*, 14(2), 1-14. <https://doi.org/10.4067/s0718-18762019000200102>
- Chen, S. C., & Dhillon, G. S. (2003). Interpreting dimensions of consumer trust in e-commerce. *Information technology and management*, 4(2), 303-318.
- Chitra Yuliashri Katili, Kadir, R. D., Asma Polapa, & Gobel, R. (2025). Mediating Role of Islamic Social Reporting on the Nexus Between Sharia Supervisory Board Characteristics and Islamic Banks' Financial Performance in Indonesia. *Journal of Enterprise and Development*, 7(1), 28-40. <https://doi.org/10.20414/jed.v7i1.12598>
- Chouffani, R. (2022, August 19). *4 types of loyalty programs and their benefits*. SearchCustomerExperience. <https://www.techtarget.com/searchcustomerexperience/tip/4-types-of-loyalty-programs-and-their-benefits>
- Cook, K. S., & Rice, E. (2006). Social exchange theory. *Springer eBooks* (pp. 53-76). https://doi.org/10.1007/0-387-36921-x_3
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approach*. Sage publications.
- Cropanzano, R., & Baron, R. A. (1991). Injustice and organizational conflict: The moderating effect of power restoration. *International Journal of Conflict Management*, 2(1), 5-26. <https://doi.org/10.4135/9781412994088.N340>
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of management*, 31(6), 874-900. <https://doi.org/10.1177/0149206305279602>
- DeLamater, J. D., & Ward, A. (Eds.). (2006). *Handbook of social psychology* (p. 571). Berlin: Springer.
- Dick, A. S., & Basu, K. (1994). Customer loyalty: toward an integrated conceptual framework. *Journal of the academy of marketing science*, 22(2), 99-113. <https://doi.org/10.1177/0092070394222001>
- Dong, L., Ji, T., Zhou, G., & Zhang, J. (2022). Subjective norms or psychological empowerment? Moderation effect of power distance on knowledge sharing. *Sustainability*, 14(21), 14407. <https://doi.org/10.3390/su142114407>
- Eagly, A. H. (1993). *The psychology of attitudes*. Thomson Wadsworth.
- Emarsys. (2025, August 4). *The Definitive Guide to Customer Engagement in 2024*. SAP Emarsys. <https://emarsys.com/the-definitive-guide-to-customer-engagement/>
- Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology*, 2, 335-362. <https://doi.org/10.1146/annurev.so.02.080176.002003>

- Fehr, E., & Fischbacher, U. (2003). The nature of human altruism. *Nature*, 425(6960), 785-791. <https://doi.org/10.1038/nature02043>
- Foa, E. B., & Foa, U. G. (1980). Resource theory: Interpersonal behavior as exchange. *Social exchange: Advances in theory and research* (pp. 77-94). Boston, MA: Springer US.
- Frost, N. (2021). *Qualitative research methods in psychology: Combining core approaches 2e*. McGraw-Hill Education (UK).
- Garfinkel, M., Hosler, S., Whelan, C., & Minor, E. (2022). Powerline corridors can add ecological value to suburban landscapes when not maintained as lawn. *Sustainability*, 14(12), 7113. <https://doi.org/10.3390/su14127113>
- Gee, R., Coates, G., & Nicholson, M. (2008). Understanding and Profitably Managing Customer Loyalty. *Marketing Intelligence & Planning*, 26(4), 359-374. <https://doi.org/10.1108/02634500810879278>
- Gefen, D., & Straub, D. W. (2004). Consumer trust in B2C e-Commerce and the importance of social presence: experiments in e-Products and e-Services. *Omega*, 32(6), 407-424. <https://doi.org/10.1016/j.omega.2004.01.006>
- Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of marketing*, 18(4), 36-44. <https://doi.org/10.1108/eum000000004784>
- Gültekin, B., & Veuphuteh, F. M. (2023). Price sensitivity, perceived food quality, and intention to purchase fast food in the context of Health-Consciousness of university students. *OPUS Journal of Society Research*, 20(52), 317-334. <https://doi.org/10.26466/opusjsr.1210008>
- Hagger, M. S., Cheung, M. W. L., Ajzen, I., & Hamilton, K. (2022). Perceived behavioral control moderating effects in the theory of planned behavior: A meta-analysis. *Health Psychology*, 41(2), 155. <https://psycnet.apa.org/doi/10.1037/hea0001153>
- Hair, J. F., Babin, B. J., Anderson, R. E., & Black, W. C. (2019). *Multivariate Data Analysis* (8th ed.). England: Pearson Prentice.
- Hallikainen, H., & Laukkanen, T. (2021). Trustworthiness in e-commerce: A replication study of competing measures. *Journal of Business Research*, 126, 644-653. <https://doi.org/10.1016/j.jbusres.2019.12.033>
- Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty, and profitability: an empirical study. *International journal of service industry management*, 7(4), 27-42.
- Ham, M., Jeger, M., & Frajman Ivković, A. (2015). The role of subjective norms in forming the intention to purchase green food. *Economic research-Ekonomska istraživanja*, 28(1), 738-748. <https://doi.org/10.1080/1331677x.2015.1083875>

- Haris, J., Rahim, S. A., Haris, M., & Zahari, M. S. (2021). Using the theory of planned behaviour to predict purchase intention towards using Taobao. *International Journal of Academic Research in Business and Social Sciences*, *11*(2), 952-959.
- Hiatt, M. S., Lowman, G. H., Maloni, M., Swaim, J., & Veliyath, R. (2023). Ability, benevolence, and integrity: The strong link between student trust in their professors and satisfaction. *The International Journal of Management Education*, *21*(2), 100768. <https://doi.org/10.1016/j.ijme.2023.100768>
- Hofman-Kohlmeyer, M. (2016, September). Customer loyalty program as a tool of customer retention: literature review. *CBU International Conference Proceedings*, *4*, 199-203.. <https://doi.org/10.12955/cbup.v4.762>
- Hoque, M. Z., & Hossan, M. A. (2020). Understanding the Influence of Belief and Belief Revision on Consumers' Purchase Intention of Liquid Milk. *SAGE Open*, *10*(2). <https://doi.org/10.1177/2158244020922972>
- Hua, N., Hight, S., Wei, W., Ozturk, A. B., Zhao, X., Nusair, K., & DeFranco, A. (2019). The power of e-commerce. *International Journal of Contemporary Hospitality Management*, *31*(4), 1906–1923. <https://doi.org/10.1108/ijchm-02-2018-0168>
- Ibrahim, A. (2025, January 1). *Enhancing customer loyalty in the food and beverage industry through strategic communication*. ULTATEL Blog. <https://blog.ultatel.com/customer-loyalty-in-food-and-beverage-industry>
- Idika, D. O., Owan, V. J., & Agama, V. U. (2023). *The application of the nominal scale of measurement in research data analysis*.
- Izquierdo-Yusta, A., Martínez–Ruiz, M. P., & Pérez–Villarreal, H. H. (2022). Studying the impact of food values, subjective norm and brand love on behavioral loyalty. *Journal of Retailing and Consumer Services*, *65*, 102885. <https://doi.org/10.1016/j.jretconser.2021.102885>
- Jacoby, J., & Kyner, D. B. (1973). Brand loyalty vs. repeat purchasing behavior. *Journal of Marketing research*, *10*(1), 1-9. <https://doi.org/10.1177/002224377301000101>
- Jain, R., & Chetty, P. (2020, February 17). *What are quantitative research sampling methods?*. Project Guru. <https://www.projectguru.in/what-are-quantitative-research-sampling-methods/>
- Johnson, M. D., & Fornell, C. (1991). A framework for comparing customer satisfaction across individuals and product categories. *Journal of economic psychology*, *12*(2), 267-286. [https://doi.org/10.1016/0167-4870\(91\)90016-m](https://doi.org/10.1016/0167-4870(91)90016-m)
- Kan, M. P., & Fabrigar, L. R. (2017). Theory of planned behavior. *Encyclopedia of personality and individual differences* (pp. 1-8). Springer, Cham. https://doi.org/10.1007/978-3-319-28099-8_1191-1

- Kang, J., & Kim, S. (2013). What Are Consumers Afraid of? Understanding Perceived Risk toward the Consumption of Environmentally Sustainable Apparel. *Family and Consumer Sciences Research Journal*, 41(3), 267–283. <https://doi.org/10.1111/fcsr.12013>
- Khamitov, M., Rajavi, K., Huang, D. W., & Hong, Y. (2024). Consumer trust: Meta-analysis of 50 years of empirical research. *Journal of Consumer Research*, 51(1), 7-18. <https://doi.org/10.1093/jcr/ucad065>
- Khan, Y., Hameed, I., & Akram, U. (2023). What drives attitude, purchase intention and consumer buying behavior toward organic food? A self-determination theory and theory of planned behavior perspective. *British Food Journal*, 125(7), 2572-2587. <http://dx.doi.org/10.1108/BFJ-07-2022-0564>
- Kidwell, B., & Jewell, R. D. (2003). An examination of perceived behavioral control: Internal and external influences on intention. *Psychology & Marketing*, 20(7), 625-642. <https://doi.org/10.1002/mar.10089>
- Kim, H. Y. (2013). Statistical Notes for Clinical Researchers: Assessing Normal Distribution (2) Using Skewness and Kurtosis. *Restorative Dentistry & Endodontics*, 38(1), 52–54. <https://doi.org/10.5395/rde.2013.38.1.52>
- Kim, H. Y., Lee, J. Y., Choi, D., Wu, J., & Johnson, K. K. (2013). Perceived benefits of retail loyalty programs: Their effects on program loyalty and customer loyalty. *Journal of Relationship Marketing*, 12(2), 95-113. <https://doi.org/10.1080/15332667.2013.794100>
- Kim, L., Jindabot, T., & Yeo, S. F. (2024). Understanding customer loyalty in banking industry: A systematic review and meta analysis. *Heliyon*, 10(17). <https://doi.org/10.1016/j.heliyon.2024.e36619>
- Kumar, N. K. (2023). Autocorrelation and Heteroscedasticity in Regression Analysis. *Journal of Business and Social Sciences*, 5(1), 9–20. <https://doi.org/10.3126/jbss.v5i1.72442>
- Kumar, V., & Reinartz, W. (2012). Loyalty programs: design and effectiveness. *Customer relationship management* (pp. 183-206). Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-662-55381-7_10
- Kurt, S. (2023, November 7). *Equity Theory: Definition, origins, components and examples*. Education Library. <https://educationlibrary.org/equity-theory-definition-origins-components-and-examples/>
- La Barbera, F., & Ajzen, I. (2020). Control interactions in the theory of planned behavior: Rethinking the role of subjective norm. *Europe's Journal of Psychology*, 16(3), 401. <https://doi.org/10.5964/ejop.v16i3.2056>
- Lin, B., Chen, Y., & Zhang, L. (2022). Research on the factors influencing the re-purchase intention on short video platforms: A case of China. *PloS one*, 17(3), e0265090. <https://doi.org/10.1371/journal.pone.0265090>

- Lowe, N. K. (2019). What is a pilot study?. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 48(2), 117-118. <https://doi.org/10.1016/j.jogn.2019.01.005>
- McCombes, S. (2023). *Sampling Methods | Types, Techniques & Examples*. Scribbr. <https://www.scribbr.com/methodology/sampling-methods/>
- McCormick, K., Salcedo, J., & Poh, A. (2016). *The origin of SPSS statistics dummies*. Com.
- Memon, M. A., Ting, H., Cheah, J. H., Thurasamy, R., Chuah, F., & Cham, T. H. (2020). *Journal of Applied Structural Equation Modeling*.
- Meyer-Waarden, L. (2005). Loyalty Programs and Their Impact on Repeat Purchase Behaviour: An Extension on the “Single Source” Panel BehaviorScan. *Data Analysis and Decision Support* (pp. 257-268). Berlin, Heidelberg: Springer Berlin Heidelberg. https://doi.org/10.1007/3-540-28397-8_29
- Mimouni-Chaabane, A., & Volle, P. (2010). Perceived benefits of loyalty programs: Scale development and implications for relational strategies. *Journal of business research*, 63(1), 32-37. <https://doi.org/10.1016/j.jbusres.2009.01.008>
- Mirzaei, A., Baumann, C., Johnson, L. W., & Gray, D. (2016). The impact of brand health on customer equity. *Journal of Retailing and Consumer Services*, 33, 8-16. <https://doi.org/10.1016/j.jretconser.2016.07.001>
- Møller Jensen, J. (2011). Consumer loyalty on the grocery product market: an empirical application of Dick and Basu's framework. *Journal of Consumer Marketing*, 28(5), 333-343.
- Molm, L. D. (1997). *Coercive power in social exchange*. New York: Cambridge University Press. <https://doi.org/10.1017/CBO9780511570919>
- Morgan, K. (1970). Sample size determination using Krejcie and Morgan table. *Kenya Projects Organization (KENPRO)*, 38(1970), 607-610.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of marketing*, 58(3), 20-38.
- Morrow Jr, J. L., Hansen, M. H., & Pearson, A. W. (2004). The cognitive and affective antecedents of general trust within cooperative organizations. *Journal of managerial issues*, 48-64.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of management review*, 23(2), 242-266. <http://dx.doi.org/10.2307/259373>
- Nguyen, H. T., Nguyen, H., Nguyen, N. D., & Phan, A. C. (2018). Determinants of customer satisfaction and loyalty in Vietnamese life-insurance setting. *Sustainability*, 10(4), 1151. <https://doi.org/10.3390/su10041151>

- Nickerson, C., & Mcleod, S. (2023). *Social exchange theory of relationships: Examples & more*. Simply Psychology, available at: www.simplypsychology.org/what-is-social-exchange-theory.html.
- Noori, H. (2022). Social capital and structural disadvantages: A case of Community-Driven Development program in Afghanistan. *Asian Social Work and Policy Review*, 16(1), 68-79. <https://doi.org/10.1111/ASWP.12248>
- Oliver, R. L. (1999). Whence consumer loyalty?. *Journal of marketing*, 63(4_suppl1), 33-44. <https://doi.org/10.1177/00222429990634s105>
- Pai, C. K., Chen, T., Lee, T. J., & Wu, X. D. (2024). Hotel brand signature, brand attitude, subject norm, and perceived behavior control. *Journal of Vacation Marketing*, 13567667241253890. <https://doi.org/10.1177/13567667241253890>
- Panaitescu, M. (2018). Modern Consumer and CRM-Customer Relationship Management Platforms. *EIRP Proceedings*, 13.
- Pansari, A., & Kumar, V. (2017). Customer engagement: the construct, antecedents, and consequences. *Journal of the academy of marketing science*, 45(3), 294-311. <https://doi.org/10.1007/s11747-016-0485-6>
- Ponto, J. (2015). Understanding and evaluating survey research. *Journal of the advanced practitioner in oncology*, 6(2), 168.
- Price, O., & Lovell, K. (2018). Quantitative research design. *A research handbook for patient and public involvement researchers* (pp. 40-50). Manchester University Press. <https://doi.org/10.7765/9781526136527.00008>
- Rahman, A., & Muktadir, G. (2021). SPSS: An Imperative Quantitative Data Analysis Tool for Social Science Research. *International Journal of Research and Innovation in Social Science*, 05(10), 300–302. Researchgate. <http://dx.doi.org/10.47772/IJRIS.2021.51012>
- Rashid, M. H. U., Nurunnabi, M., Rahman, M., & Masud, M. A. K. (2020). Exploring the relationship between customer loyalty and financial performance of banks: Customer open innovation perspective. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 108. <https://doi.org/10.3390/joitmc6040108>
- Rawat, A. S. (2021). *An Overview of Descriptive Analysis*. Analytic Steps.
- Redmond, M. (2015). *Social exchange theory*.
- Rese, M., Hundertmark, A., Schimmelpfennig, H., & Schons, L. M. (2013). Loyalty program types as drivers of customer retention: a comparison of stand-alone programs and multi-vendor loyalty programs through the lens of transaction cost economics. *The International review of retail, distribution and consumer research*, 23(3), 305-323. <https://doi.org/10.1080/09593969.2013.775957>

- Rotter, J. B. (1980). Interpersonal trust, trustworthiness, and gullibility. *American psychologist*, 35(1), 1.
- Rowley, J. (2005). The four Cs of customer loyalty. *Marketing intelligence & planning*, 23(6), 574-581.
- Rozenkowska, K. (2023). Theory of planned behavior in consumer behavior research: A systematic literature review. *International Journal of Consumer Studies*, 47(6), 2670-2700. <http://dx.doi.org/10.1111/ijcs.12970>
- Saini, S., & Singh, J. (2020). A link between attitudinal and behavioral loyalty of service customers. *Business Perspectives and Research*, 8(2), 205-215. <https://doi.org/10.1177/2278533719887452>
- Salleh, M. S. M., Misron, A., & Musa, N. C. (2024). Examining the mediating effects of perceived behavioral control and purchase intention on sustainable consumer behavior. *International Journal of Academic Research in Business and Social Sciences*, 14(12), 3951-3972.. <https://doi.org/10.6007/ijarbss/v14-i12/23709>
- Schmidt, A. F., & Finan, C. (2018). Linear regression and the normality assumption. *Journal of Clinical Epidemiology*, 98(1), 146–151. <https://doi.org/10.1016/j.jclinepi.2017.12.006>
- Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: appropriate use and interpretation. *Anesthesia & analgesia*, 126(5), 1763-1768.
- Sentosa, I., & Mat, N. K. N. (2012). Examining a theory of planned behavior (TPB) and technology acceptance model (TAM) in internet purchasing using structural equation modeling. *Researchers World*, 3, Part 2, 62.
- Sharp, B., & Sharp, A. (1997). Loyalty programs and their impact on repeat-purchase loyalty patterns. *International journal of Research in Marketing*, 14(5), 473-486.
- Sheeran, P. (2002). Intention—behavior relations: a conceptual and empirical review. *European review of social psychology*, 12(1), 1-36. <https://doi.org/10.1080/14792772143000003>
- Sheeran, P., Trafimow, D., & Armitage, C. J. (2003). Predicting behaviour from perceived behavioural control: Tests of the accuracy assumption of the theory of planned behaviour. *British journal of social psychology*, 42(3), 393-410. <https://doi.org/10.1348/014466603322438224>
- Singh, J., & Sirdeshmukh, D. (2000). Agency and trust mechanisms in consumer satisfaction and loyalty judgments. *Journal of the Academy of marketing Science*, 28(1), 150-167.
- Singh, K. (2021). *The Impact of Customer Loyalty Programmes on Consumer Decision-making and Brand Loyalty: A University of KwaZulu-Natal Student Perspective* (Doctoral dissertation, University of KwaZulu-Natal, Westville).

- Singh, S. (2024, December 17). *What is Descriptive Research? Definition, Methods, Types and Examples*. Researcher.Life. <https://researcher.life/blog/article/what-is-descriptive-research-definition-methods-types-and-examples/>
- Sirisilla, S., & Sirisilla, S. (2023, February 9). *Bridging the Gap: Overcome these 7 flaws in descriptive research design*. Enago Academy. <https://www.enago.com/academy/descriptive-research-design/>
- Somasundaram, S. (2023, October 7). *Data Coding in Research Methodology*. ILovePhD. <https://www.ilovephd.com/data-coding-in-research-methodology/>
- Sondari, T., Sari, N. Z. M., & Nuraliati, A. (2025). Service-dominant logic in the hotel industry: Pathway to brand awareness and loyalty. *Asian Management and Business Review*, 5(1), 231-245. <https://doi.org/10.20885/ambr.vol5.iss1.art15>
- Spero, I., & Stone, M. (2004). Agents of change: how young consumers are changing the world of marketing. *Qualitative Market Research: An International Journal*, 7(2), 153-159. <http://dx.doi.org/10.1108/13522750410530057>
- Spiteri, J. M., & Dion, P. A. (2004). Customer value, overall satisfaction, end-user loyalty, and market performance in detail intensive industries. *Industrial marketing management*, 33(8), 675-687.. <https://doi.org/10.1016/j.indmarman.2004.03.005>
- Stewart, L. (2025). *Convenience Sampling Method in Research*. ATLAS.ti. <https://atlasti.com/research-hub/convenience-sampling>
- Stewart, L. (2025). *What is Descriptive Research and How is it Used?* ATLAS.ti. <https://atlasti.com/research-hub/descriptive-research>
- Streiner, D. L. (2003). Starting at the beginning: an introduction to coefficient alpha and internal consistency. *Journal of personality assessment*, 80(1), 99-103. https://doi.org/10.1207/s15327752jpa8001_18
- Suer, M. (2023, September 22). *What Is Data Quality and Why Is It Important?* Alation. <https://www.alation.com/blog/what-is-data-quality-why-is-it-important/>
- Sung, H., Kang, J. H., Moon, S., Choi, J., You, M., & Choi, I. (2021). Emotional change, satisfaction, and attachment to a sport mega-event: The PyeongChang 2018 Winter Olympics. *Journal of Hospitality and Tourism Management*, 48, 240-247. <https://doi.org/10.1016/j.jhtm.2021.06.010>
- Sus, V., & Drew, C. (2023, May 17). *Subjective Norms: Definition and Examples*. Helpfulprofessor.com. <https://helpfulprofessor.com/subjective-norms/>
- Sykes, A. O. (1993). *An introduction to regression analysis*.

- Tam, R., Yassa, B., Parker, H., O'Connor, H., & Allman-Farinelli, M. (2017). University students' on-campus food purchasing behaviors, preferences, and opinions on food availability. *Nutrition*, 37, 7-13. <https://doi.org/10.1016/j.nut.2016.07.007>
- Taylor, S. (2024, July 10). *Multiple Linear regression*. Corporate Finance Institute. <https://corporatefinanceinstitute.com/resources/data-science/multiple-linear-regression/>
- Taylor, S. (2024, May 26). *Level of measurement*. Corporate Finance Institute. <https://corporatefinanceinstitute.com/resources/data-science/level-of-measurement/>
- Thompson, C. G., Kim, R. S., Aloe, A. M., & Becker, B. J. (2017). Extracting the variance inflation factor and other multicollinearity diagnostics from typical regression results. *Basic and applied social psychology*, 39(2), 81-90.
- Varey, R. J. (2015). Social exchange (theory). *Wiley encyclopedia of management*, 1-3. <http://dx.doi.org/10.1002/9781118785317.weom090245>
- Verleye, K. (2015). The co-creation experience from the customer perspective: its measurement and determinants. *Journal of Service Management*, 26(2), 321-342. <https://doi.org/10.1108/josm-09-2014-0254>
- Vinod, B. (2011). Unleashing the power of loyalty programs—The next 30 years. *Journal of Revenue and Pricing Management*, 10(5), 471-476. <https://doi.org/10.1057/rpm.2011.11>
- Vinzi, V. E. (2010). *Handbook of partial least squares*.
- Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer engagement: Exploring customer relationships beyond purchase. *Journal of marketing theory and practice*, 20(2), 122-146.. <https://doi.org/10.2753/mtp1069-6679200201>
- Vivek, S. D., Beatty, S. E., Dalela, V., & Morgan, R. M. (2014). A generalized multidimensional scale for measuring customer engagement. *Journal of marketing theory and practice*, 22(4), 401-420. <https://doi.org/10.2753/mtp1069-6679220404>
- Vorhies, B. (2017). *SPSS Statistics to Predict Customer Behavior [Webinar]*. Data Science Central.
- Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS quarterly*, 35-57. <http://dx.doi.org/10.2307/25148667>
- Wong, K. K. K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing bulletin*, 24(1), 1-32.
- Yang, Q., Kang, Q., Huang, Q., Cui, Z., Bai, Y., & Wei, H. (2021). Linear correlation analysis of ammunition storage environment based on Pearson correlation

- analysis. *Journal of Physics Conference Series*, 1948(1), 012064. <https://doi.org/10.1088/1742-6596/1948/1/012064>
- Yi, Y., & Jeon, H. (2003). Effects of loyalty programs on value perception, program loyalty, and brand loyalty. *Journal of the academy of marketing science*, 31(3), 229-240. <https://doi.org/10.1177/009207030303031003002>
- Yi, Y., & La, S. (2004). What influences the relationship between customer satisfaction and repurchase intention? Investigating the effects of adjusted expectations and customer loyalty. *Psychology & Marketing*, 21(5), 351-373. <https://doi.org/10.1002/mar.20009>
- Zakaria, I., Rahman, B. A., Othman, A. K., Yunus, N. A. M., Dzulkipli, M. R., & Osman, M. A. F. (2014). The relationship between loyalty program, customer satisfaction and customer loyalty in retail industry: A case study. *Procedia-social and behavioral sciences*, 129, 23-30. <https://doi.org/10.1016/j.sbspro.2014.03.643>
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of marketing*, 60(2), 31-46. <https://doi.org/10.1177/002224299606000203>
- Zhang, Y., Wu, S., & Rasheed, M. I. (2020). Conscientiousness and smartphone recycling intention: The moderating effect of risk perception. *Waste Management*, 101, 116-125. <https://doi.org/10.1016/j.wasman.2019.09.040>
- Zia, A. (2024). *The Impact of Salesmen's Customer-Oriented Behavior on Customer Satisfaction in Finland*.

APPENDICES

Appendix 1: Adapted Measurement Items

Variables	Measurement Items	Adapted/ Adopted Measurement Items	References
IV1: Customer Satisfaction (CS)	<ol style="list-style-type: none"> 1) Overall, I am satisfied with the professor. 2) The instructor created an environment which motivated me to learn. 3) Overall, I would rate this instructor as effective. 4) I would not recommend to other students that they take a course from this instructor. 	<ol style="list-style-type: none"> 1) Overall, I am satisfied with the beverage products. 2) The retailers created an environment which motivated me to purchase more. 3) Overall, I would rate this retailer as efficient. 4) I would recommend to other people to purchase beverages from this retailer. 	(Hiatt et al., 2023)
IV2: Customer Trust (CT)	<ol style="list-style-type: none"> 1) Promises made by Amazon.com are likely to be reliable. 2) I do not doubt the honesty. 3) I expect that Amazon.com will keep promises they make. 4) I expect that the advice given by Amazon.com is their best adjustment. 5) I expect I can count on Amazon.com to 	<ol style="list-style-type: none"> 1) Promises made by the beverage retailer are likely to be reliable. 2) I do not doubt the honesty. 3) I expect that the beverage retailer will keep the promises they make. 4) I expect that the advice given by the beverage retailer is their best adjustment. 5) I expect I can count on the 	(Gefen & Straub, 2004)

	<p>consider how its actions affect them.</p> <p>6) I expect that Amazon.com intentions are benevolent.</p> <p>7) I expect that Amazon.com puts customers' interests before their own.</p> <p>8) I expect that Amazon.com is well meaning.</p> <p>9) Amazon.com is competent.</p> <p>10) Amazon.com is understands the market it works in.</p> <p>11) Amazon.com know about books.</p>	<p>beverage retailer to consider how its actions affect them.</p> <p>6) I expect that the beverage retailer intentions are benevolent.</p> <p>7) I expect that the beverage retailer puts customers' interests before their own.</p> <p>8) I expect that the beverage retailer is well meaning.</p> <p>9) The beverage retailer is competent.</p> <p>10) The beverage retailer is understanding the market it works in.</p> <p>11) The beverage retailer knows about beverages.</p>	
IV3: Customer Engagement (CE)	<p>1) Anything related to ___ grabs my attention.</p> <p>2) I like to learn more about ___.</p> <p>3) I pay a lot of attention to anything about ___.</p> <p>4) I spend a lot of my discretionary time to ___.</p> <p>5) I am heavily into ___.</p>	<p>1) Anything related to beverage products grabs my attention.</p> <p>2) I like to learn more about beverage products.</p> <p>3) I pay a lot of attention to anything about beverage.</p> <p>4) I spend a lot of my discretionary time to drink beverage.</p>	(Vivek et al., 2014)

	<p>6) I am passionate about ____.</p> <p>7) My day would not be the same without ____.</p> <p>8) I love__with my friends.</p> <p>9) ____ is more fun when other people around me do it too.</p>	<p>5) I am heavily into beverage products.</p> <p>6) I am passionate about beverage products.</p> <p>7) My day would not be the same without beverages.</p> <p>8) I love drink beverages with my friends.</p> <p>9) Drinking beverages is more fun when other people around me do it too.</p>	
IV4: Subjective Norm (SN)	<p>1) Most people whose opinion I value would approve of my engagement in beverage products.</p> <p>2) Most people who are important to me think that I should engage in beverage products.</p> <p>3) It is expected of me that I should engage in beverage products.</p>	<p>1) Most people whose opinion I value would approve of my engagement in beverage products.</p> <p>2) Most people who are important to me think that I should engage in beverage products.</p> <p>3) It is expected of me that I should engage in beverage products.</p>	(Abd Ghani et al., 2017)
IV5: Attitude (ATT)	<p>1) I would be willing to purchase through internet.</p> <p>2) Buying things over the internet is an idea I like.</p> <p>3) I feel the internet purchasing give me inspiration and help me to live up</p>	<p>1) I would be willing to purchase beverage products through applications.</p> <p>2) Buying beverages products through applications is an idea I like.</p> <p>3) I feel that buying beverages through</p>	(Sentosa Ilham & Mat, 2012)

	to my best during my study period.	the application gives me inspiration and help me to live up to my best during my study period.	
IV6: Perceived Behavioral Control (PBC)	<ol style="list-style-type: none"> 1) If I want to, I will easily be able to ____. 2) The number of external influences that may prevent me from ____. 3) How much control do you think you have over your ability to ____. 	<ol style="list-style-type: none"> 1) If I want to, I will easily be able to purchase beverage products. 2) The number of external influences that may prevent me from purchase beverage products. 3) How much control do you think you have over your ability to purchase beverage products? 	(Ajzen, 2002)

Appendix 2: Survey Questionnaire

Section A: Demographic Information

1. Email Address: _____
2. Gender
 - Male
 - Female
3. Age: _____
 - 18-20
 - 21-25
 - 26-30
 - Above 30 _____
4. Ethnicity
 - Malays
 - Chinese
 - Indians
 - Others: _____
5. Frequency of purchase of beverages in one week. _____
 - 0-2 times
 - 3-5 times
 - 6-8 times
 - Above 8 times
6. Mode of purchasing food and beverages:
 - Walk-in to shops/ Dine-in
 - Takeaway
 - Online purchase (e.g. Shopee food, Grab Food etc.)
 - In-apps purchases (e.g. Tealive apps, Starbucks application etc.)
 - Others: _____

Section B: Loyalty Programmes

1. How many times do you use mobile applications related to beverages in one week?
 - 0-2 times
 - 3-5 times
 - 6-8 times
 - Above 8 times
2. Are you aware of beverage's loyalty programme?
 - Yes
 - No

3. Are you currently a member of any loyalty programme offered by a beverages brand (e.g., Starbucks Rewards, Tealive UniTea, Boost Juice VIBE Club)?
- Yes
 - No
4. How long have you been a member?
- Less than 1 year
 - 2-4 years
 - 5-7 years
 - Above 7 years
5. How often do you use the loyalty programme benefits? _____
- 0-1 times
 - 2-3 times
 - 4-5 times
 - 6-7 times
 - Above 7 times
6. What type of rewards do you find most appealing in a loyalty program?
- Discounts
 - Free products (e.g., free drink after 10 purchases)
 - Points-based systems (e.g., earn points for every purchase)
 - Exclusive offers or promotions
 - Other (please specify): _____
7. Have you ever shared a loyalty program promotion with your friends or on social media?
- Yes
 - No

Section C: Variables

Q1. Kindly rate the following statements on **customer loyalty** from 1 (strongly disagree) to 5 (strongly agree).

	1	2	3	4	5
CL1: I would like to revisit the beverage retailer that I have already dealt with.					
CL2: I recommend my family, friends, and relatives to visit the beverage retailer that I am already dealing with.					
CL3: I will spread positive word-of-mouth about the beverage retailer and its high-quality services.					

Q2. Kindly rate the following statements on **customer satisfaction** from 1 (strongly disagree) to 5 (strongly agree).

	1	2	3	4	5
CS1: Overall, I am satisfied with the beverage products.					
CS2: The beverage retailers created an environment that motivated me to purchase more.					
CS3: Overall, I would rate this retailer as efficient.					
CS4: I would recommend to other people to purchase beverages from this retailer.					

Q3. Kindly rate the following statements on **customer trust** from 1 (strongly disagree) to 5 (strongly agree).

	1	2	3	4	5
CT1: Promises made by the beverage retailer are likely to be reliable.					
CT2: I do not doubt the honesty.					
CT3: I expect that the beverage retailer will keep the promises they make.					
CT4: I expect that the advice given by the beverage retailer is their best adjustment.					
CT5: I expect I can count on the beverage retailer to consider how its actions affect them.					
CT6: I expect that the beverage retailer's intentions are benevolent.					
CT7: I expect that the beverage retailer puts customers' interests before their own.					
CT8: I expect that the beverage retailer is well-meaning.					
CT9: The beverage retailer is competent.					
CT10: The beverage retailer understands the market it works in.					
CT11: The beverage retailer knows about beverages.					

Q4. Kindly rate the following statements on **customer engagement** from 1(strongly disagree) to 5(strongly agree).

	1	2	3	4	5
CE1: Anything related to beverage products grabs my attention.					
CE2: I like to learn more about beverage products.					
CE3: I pay a lot of attention to anything about beverage.					
CE4: I spend a lot of my discretionary time to drink beverage.					
CE5: I am heavily into beverage products.					
CE6: I am passionate about beverage products.					
CE7: My day would not be the same without beverages.					
CE8: I love drink beverages with my friends.					
CE9: Drinking beverages is more fun when other people around me do it too.					

Q5. Kindly rate the following statements on **subjective norm** from 1(strongly disagree) to 5(strongly agree).

	1	2	3	4	5
SN1: Most people whose opinion I value would approve of my engagement in beverage products.					
SN2: Most people who are important to me think that I should engage in beverage products.					
SN3: It is expected of me that I should engage in beverage products.					

Q6. Kindly rate the following statements on **attitude** from 1(strongly disagree) to 5(strongly agree).

	1	2	3	4	5
A1: I would be willing to purchase beverage products through applications.					
A2: Buying beverages products through applications is an idea I like.					
A3: I feel that buying beverages through the application gives me inspiration and help me to live up to my best during my study period.					

Q7. Kindly rate the following statements on **perceived behavioral control** from 1(strongly disagree) to 5(strongly agree).

	1	2	3	4	5
PBC1: If I want to, I will easily be able to purchase beverage products.					
PBC2: The number of external influences that may prevent me from purchase beverage products.					
PBC3: How much control do you think you have over your ability to purchase beverage products?					

Q8: Kindly rate the following statements on **purchasing intention** from 1(strongly disagree) to 5(strongly agree).

	1	2	3	4	5
INT1: Given the chance, I intend to purchase from the same beverage retailer.					
INT2: Given the chance, I predict that I should purchase from the same beverage retailer.					
INT3: It is likely that I will purchase from the same beverage retailer soon.					

Q9. Kindly rate the following statements on **behavior** from 1 (strongly disagree) to 5 (strongly agree).

	1	2	3	4	5
B1: I usually use the applications to purchase products or services at least once in a few months.					
B2: I purchase products or services from the applications on regular basis.					
B3: I have bought many products or services from the same beverage retailer.					

Appendix 3: SPSS Results

Table 4.1.1 Reliability Test (Pilot Test):

Customer Loyalty Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	N of Items
.839	3

Customer Satisfaction Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	N of Items
.877	4

Customer Trust Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	N of Items
.935	11

Customer Engagement Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	N of Items
.955	9

Subjective Norm Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	N of Items
.902	3

Attitude Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	N of Items
.778	3

Perceived Behavioral Control Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	N of Items
.705	3

Table 4.1.2 Regression Results (Pilot Test):

Model 1:

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.883 ^a	.780	.755	.33541

a. Predictors: (Constant), CE, CS, CT

b. Dependent Variable: CL

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.393	3	3.464	30.794	<.001 ^b
	Residual	2.925	26	.113		
	Total	13.319	29			

a. Dependent Variable: CL

b. Predictors: (Constant), CE, CS, CT

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.311	.477		-.652	.520		
	CS	.183	.218	.175	.839	.409	.193	5.169
	CT	1.003	.325	.861	3.089	.005	.109	9.206
	CE	-.131	.121	-.181	-1.081	.289	.303	3.302

a. Dependent Variable: CL

Model 2:

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.823 ^a	.677	.623	.40720

a. Predictors: (Constant), PI, SN, PBC, ATT

b. Dependent Variable: CL

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.350	4	2.088	12.590	<.001 ^b
	Residual	3.979	24	.166		
	Total	12.330	28			

a. Dependent Variable: CL

b. Predictors: (Constant), PI, SN, PBC, ATT

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.231	.550		.419	.679		
	SN	-.119	.127	-.176	-.938	.357	.383	2.610
	ATT	.129	.180	.149	.719	.479	.312	3.210
	PBC	.645	.200	.605	3.221	.004	.382	2.621
	PI	.281	.234	.279	1.204	.240	.250	3.998

a. Dependent Variable: CL

Table 4.2.1 Descriptive Results (Summary of Respondent Profiles)

Gender

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	79	36.2	36.2	36.2
	2	139	63.8	63.8	100.0
	Total	218	100.0	100.0	

Age

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	22	10.1	10.1	10.1
	2	190	87.2	87.2	97.2
	3	5	2.3	2.3	99.5
	4	1	.5	.5	100.0
	Total	218	100.0	100.0	

Ethnicity

Ethnicity					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	18	8.3	8.3	8.3
	2	195	89.4	89.4	97.7
	3	5	2.3	2.3	100.0
	Total	218	100.0	100.0	

Type of University

Type of University					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	42	19.3	19.3	19.3
	2	176	80.7	80.7	100.0
	Total	218	100.0	100.0	

Frequency of buying beverages

Frequency of buying purchase of beverages in one week					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	103	47.2	47.2	47.2
	2	106	48.6	48.6	95.9
	3	4	1.8	1.8	97.7
	4	5	2.3	2.3	100.0
	Total	218	100.0	100.0	

Mode of purchasing food and beverages

Mode of purchasing food and beverages					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	112	51.4	51.4	51.4
	2	33	15.1	15.1	66.5
	3	26	11.9	11.9	78.4
	4	47	21.6	21.6	100.0
	Total	218	100.0	100.0	

Are you aware of beverage's loyalty programme?

Are you aware of beverage's loyalty programme?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	194	89.0	89.0	89.0
	2	24	11.0	11.0	100.0
Total		218	100.0	100.0	

How many times do you use mobile applications to buy beverages in one week?

How many times do you use mobile applications to buy beverages in one week?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	141	64.7	64.7	64.7
	2	74	33.9	33.9	98.6
	3	1	.5	.5	99.1
	4	2	.9	.9	100.0
Total		218	100.0	100.0	

Which beverages brand loyalty programme(s) are you a member of?

Which beverages brand loyalty programme(s) are you a member of?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	99	45.4	45.4	45.4
	2	59	27.1	27.1	72.5
	3	12	5.5	5.5	78.0
	4	48	22.0	22.0	100.0
Total		218	100.0	100.0	

How long (in years) have you been a member?

How long (in years) have you been a member?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	69	31.7	31.7	31.7
	2	133	61.0	61.0	92.7
	3	14	6.4	6.4	99.1
	4	2	.9	.9	100.0
Total		218	100.0	100.0	

How often do you use the loyalty programme benefits?

How often do you use the loyalty programme benefits?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	4.6	4.6	4.6
	2	32	14.7	14.7	19.3
	3	61	28.0	28.0	47.2
	4	79	36.2	36.2	83.5
	5	36	16.5	16.5	100.0
	Total	218	100.0	100.0	

What type of rewards do you find most appealing in a loyalty program?

What type of rewards do you find most appealing in a loyalty program?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	116	53.2	53.2	53.2
	2	31	14.2	14.2	67.4
	3	42	19.3	19.3	86.7
	4	29	13.3	13.3	100.0
	Total	218	100.0	100.0	

Have you ever shared a loyalty program promotion with your friends or on social media?

Have you ever shared a loyalty program promotion with your friends or on social media?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	173	79.4	79.4	79.4
	2	45	20.6	20.6	100.0
	Total	218	100.0	100.0	

Table 4.3.1 Pearson Correlation Analysis

		Correlations						
		CL	CS	CT	CE	SN	ATT	PBC
CL	Pearson Correlation	1	.678***	.589***	.477***	.451***	.546***	.484***
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001	<.001
	N	218	218	218	218	218	218	218
CS	Pearson Correlation	.678***	1	.709***	.496***	.384***	.558***	.595***
	Sig. (2-tailed)	<.001		<.001	<.001	<.001	<.001	<.001
	N	218	218	218	218	218	218	218
CT	Pearson Correlation	.589***	.709***	1	.650***	.562***	.640***	.627***
	Sig. (2-tailed)	<.001	<.001		<.001	<.001	<.001	<.001
	N	218	218	218	218	218	218	218
CE	Pearson Correlation	.477***	.496***	.650***	1	.695***	.533***	.528***
	Sig. (2-tailed)	<.001	<.001	<.001		<.001	<.001	<.001
	N	218	218	218	218	218	218	218
SN	Pearson Correlation	.451***	.384***	.562***	.695***	1	.401***	.493***
	Sig. (2-tailed)	<.001	<.001	<.001	<.001		<.001	<.001
	N	218	218	218	218	218	218	218
ATT	Pearson Correlation	.546***	.558***	.640***	.533***	.401***	1	.508***
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001		<.001
	N	218	218	218	218	218	218	218
PBC	Pearson Correlation	.484***	.595***	.627***	.528***	.493***	.508***	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001	
	N	218	218	218	218	218	218	218

***. Correlation at 0.001 (2-tailed)

Table 4.3.2 Reliability Test (Actual Survey)

Customer Loyalty Cronbach's Alpha

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.762	.764	3

Customer Satisfaction Cronbach's Alpha

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.813	.814	4

Customer Trust Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.902	.905	11

Customer Engagement Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.898	.900	9

Subjective Norm Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.816	.818	3

Attitude Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.703	.704	3

Perceived Behavioral Control Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.565	.568	3

4.4.1 Diagnosis Test (Variance Inflation Factor, Skewness, Kurtosis)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.649	.270		2.408	.017		
	CS	.562	.075	.516	7.455	<.001	.495	2.021
	CT	.170	.098	.138	1.741	.083	.379	2.637
	CE	.120	.059	.132	2.051	.041	.576	1.738

a. Dependent Variable: CL

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.963	.297		3.244	.001		
	SN	.180	.054	.208	3.320	.001	.726	1.377
	ATT	.382	.067	.363	5.725	<.001	.712	1.405
	PBC	.224	.076	.196	2.942	.004	.642	1.557

a. Dependent Variable: CL

Statistics

		CL	CS	CT	CE	SN	ATT	PBC
N	Valid	218	218	218	218	218	218	218
	Missing	0	0	0	0	0	0	0
Skewness		-2.240	-2.321	-2.269	-1.782	-1.787	-2.189	-1.928
Std. Error of Skewness		.165	.165	.165	.165	.165	.165	.165
Kurtosis		7.821	9.403	10.195	3.903	4.237	8.483	7.852
Std. Error of Kurtosis		.328	.328	.328	.328	.328	.328	.328

4.5.1 Regression Analysis (Actual Survey)

Model 1:

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.726 ^a	.528	.514	.42826

a. Predictors: (Constant), PBC, SN, ATT, CS, CE, CT

b. Dependent Variable: CL

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.228	6	7.205	39.282	<.001 ^b
	Residual	38.699	211	.183		
	Total	81.927	217			

a. Dependent Variable: CL

b. Predictors: (Constant), PBC, SN, ATT, CS, CE, CT

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.410	.279		1.471	.143		
	CS	.538	.077	.493	6.947	<.001	.444	2.251
	CT	.031	.103	.025	.303	.763	.321	3.115
	CE	-.006	.068	-.007	-.087	.931	.400	2.501
	SN	.155	.059	.179	2.623	.009	.480	2.083
	ATT	.200	.068	.191	2.962	.003	.540	1.850
	PBC	-.009	.075	-.008	-.116	.908	.521	1.920

a. Dependent Variable: CL

Model 2:

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.703 ^a	.494	.486	.44034

a. Predictors: (Constant), CE, CS, CT

b. Dependent Variable: CL

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.433	3	13.478	69.510	<.001 ^b
	Residual	41.494	214	.194		
	Total	81.927	217			

a. Dependent Variable: CL

b. Predictors: (Constant), CE, CS, CT

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.649	.270		2.408	.017		
	CS	.562	.075	.516	7.455	<.001	.495	2.021
	CT	.170	.098	.138	1.741	.083	.379	2.637
	CE	.120	.059	.132	2.051	.041	.576	1.738

a. Dependent Variable: CL

Model 3:

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.622 ^a	.387	.379	.48431

a. Predictors: (Constant), PBC, SN, ATT

b. Dependent Variable: CL

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.732	3	10.577	45.096	<.001 ^b
	Residual	50.194	214	.235		
	Total	81.927	217			

a. Dependent Variable: CL

b. Predictors: (Constant), PBC, SN, ATT

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.963	.297		3.244	.001		
	SN	.180	.054	.208	3.320	.001	.726	1.377
	ATT	.382	.067	.363	5.725	<.001	.712	1.405
	PBC	.224	.076	.196	2.942	.004	.642	1.557

a. Dependent Variable: CL