

“A study on student and staff satisfaction towards Goa University canteen food”

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DATE: MAY 2024

DECLARATION BY STUDENT

I hereby declare that the data presented in this Dissertation report entitled, "A study on student and staff satisfaction with Goa University Canteen" is based on the results of investigations carried out by me in the commerce Discipline at the Goa University Commerce Dept, Goa University under the Supervision of Prof. Aakruthi Alankar and the same has not been submitted elsewhere for the award of a degree or diploma by me. Further, I understand that Goa University or its authorities will be not be responsible for the correctness of observations / experimental or other findings given the dissertation. I hereby authorize the University authorities to upload this dissertation on the dissertation repository or anywhere else as the UGC regulations demand and make it available to any one as needed.

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STEPHIE LOBO (58-2022)

COMPLETION CERTIFICATE

This is to certify that the dissertation report "A study on student and staff satisfaction with Goa University Canteen" is a bonafide work carried out by Ms Steffie Agnelo Lobo under my supervision in partial fulfilment of the requirements for the award of the degree of Masters in Commerce in the Discipline Commerce at the Goa Business School, Goa University.



Mrs. Aakruthi Alankar (Assistant Professor)

Date: 30/04/2024



Signature & name of the school Dean/HOD of Dept

Date: 30/04/2024

Place: Goa University



school /Dept stamp

AKNOWLEDGEMENT

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A study on student and staff satisfaction with Goa University Canteen

PREFACE

This study was carried out to identify the relationship between the food quality, quantity, price, food diversity, staff service and atmosphere of the university canteen with students 'and staff satisfaction. This study's primary goal is to examine various factors and their impact on customer satisfaction of university canteen food service. A saying goes, "Health is riches." Therefore, it not only helps them to clear their minds but also enables them to focus on their studies, families, and careers. The survey was conducted by means of a questionnaire distributed to several students and staff of Goa university. This paper takes the canteens of Goa University as an example, uses the data obtained from the questionnaire survey, and uses jamovi software to perform descriptive statistical analysis. This survey was conducted in Goa university throughout all the canteens functioning in the university and a total 304 responses were collected via convenience sampling method. The results were generated by using the Structural equation modelling (SEM) technique. Based on the analyses and results, hygiene, food quality and food diversity are the most important dimensions that influence the students and staff satisfaction on university canteen. Next, the students give less priority to price, staff service and atmosphere. The university canteen should take serious measurement in improving the food quality and food diversity for long term sustainability. The results show that students and staff are generally not satisfied with the canteen. The main factors that affect the satisfaction of the canteen are product quality, quantity and food diversity. Price, service, atmosphere are further important factors.

Keywords: University Canteen, customer satisfaction, food quality, quantity, price, staff service, atmosphere, customer satisfaction.

CHAPTER 1: INTRODUCTION

1) Introduction

Foodstuffs and beverages are sold at canteens. It is the duty of every canteen to serve customers high-quality cuisine together with appropriate service and hygienic practices. Customer happiness is a critical component of the economy. The canteen's service plays a significant role in encouraging customers to purchase wholesome food, enabling them to eat wholesome cuisine at reasonable costs throughout the day. A range of cuisines and dishes should be offered to customers by the canteen as well. Customer satisfaction pertains to the viewpoint of the customer after making a purchase, taking into account their expectations. A customer's pleasure with a product or service is determined by how well it meets their expectations (Azni et al., 2019). A student's welfare in terms of food consumption is important in their lives, in addition to learning. Every human being needs to eat on a daily basis. The quality of the food service is one of the most important factors in determining how users or potential users view a facility's superiority. The quality of food service has emerged as a critical component in the higher education sector that directly impacts the comfort and quality of campus life. Furthermore, as students are the cafeteria's primary patrons, they frequently interact with one another, which makes it possible for student complaints about the cafeteria to spread quickly. These factors make it imperative that cafeteria managers maintain a high standard. (Afroza & Haque, 2022) A key component of worker and student satisfaction is food satisfaction. The needs of food service for college students is a significant topic that requires greater investigation. While providing high-quality education is crucial, paying attention to food services might also be crucial for many universities that are struggling to keep students. (Raihen et al., 2023) The canteen plays a crucial role in university operations. In order to promote the healthy development of university students, it offers food services. Naturally, the administration of the university canteen takes precedence over all other logistical management tasks. Since the great majority of students reside on campus, eating in the canteen every day has become a daily ritual for them. Even with the appropriate subsidies, many canteens still struggle to make ends meet in light of the rising labour and pricing expenditures in recent years. University canteens must simultaneously balance the interests of the general public in education with the dictates of the free market, as well as the growing demands of students for meal options with their constrained financial means. The most crucial thing for a student in college (Wenjing, 2019). Due to their rapid growth in both physical and mental aspects

as well as cognitive development, students' nutrition intakes have a particularly significant role in their overall health and wellness. (Safia. S. Elramli, 2019). In order to ensure that there are enough appropriate foods available for students and staff to meet their energy demands, canteens are expected to serve meals that are nutritionally balanced to meet the needs of the pupils. There should be minimal provisioning rules for the number of fresh vegetables, salads, and fruit options to be provided throughout a meal, as well as requirements for the availability of vegetarian and low-fat main meals and carbohydrate-rich sides. (Carins et al., 2020). In order to achieve customer satisfaction, it is very important to recognize and to anticipate customer needs and to be able to satisfy them. The two most crucial factors that will ultimately supply competitive advantages are the Caliber of the services provided and the contentment of the clientele. The majority of the food service industries are keen to enhance the quality of their offerings in order to appease their current clientele and allocate more efforts towards attracting new ones. In order to retain their current clientele and attract new ones, university cafeterias must also enhance and modernize their offerings. (Ling Dyana Chang et al., 2014) Since food is one of a person's basic requirements, its availability is crucial. Students require the existence of a canteen on campus and instructors. Common students can satisfy their physical requirements for food and drink, or just to sit and chat with friends, at the campus cafeteria. (Ibrahim et al., 2019). Numerous factors, including family lifestyle, socioeconomic level, genetic and metabolic predisposition, and behavioural determinants, influence the prevalence of overweight and obesity. The habitual eating process, which is influenced by prior encounters with specific foods or developing a taste for particular flavours, may be more important. Behaviour patterns are formed early in infancy and are likely to stay that way into maturity. Thus, unhealthy lifestyle choices that begin in early childhood often led to adult obesity and overweight. In order to enable students, faculty, and other school staff to enjoy wholesome food at reasonable prices during the school day, the establishment and management of a school canteen is crucial to fostering a love and interest in purchasing wholesome food. Additionally, the canteen ought to serve a range of meals and snacks that improve the pupils' abilities and expertise. (Galabo, 2019). The spending power of consumers is increasing in the modern period. Undergraduates at universities are a part of this growing trend, and as their purchasing power rises, so do their expectations for dining options and experiences. An essential part of a student's university experience, the cafeteria is designed to accommodate a wide variety of age groups, nationalities, races, life experiences, and social and economic backgrounds.

1.1 Objectives of the Study: 1) To analyse the factors affecting the students, teaching and non-teaching staff satisfaction of the university canteen service

1.2 Conceptual Framework Presented in Figure 1 is the conceptual framework of study where the independent variables are Quality, Quantity, Food diversity, Price fairness, Staff service, Atmosphere and Time schedule, whereas the dependent variable is Customer satisfaction.

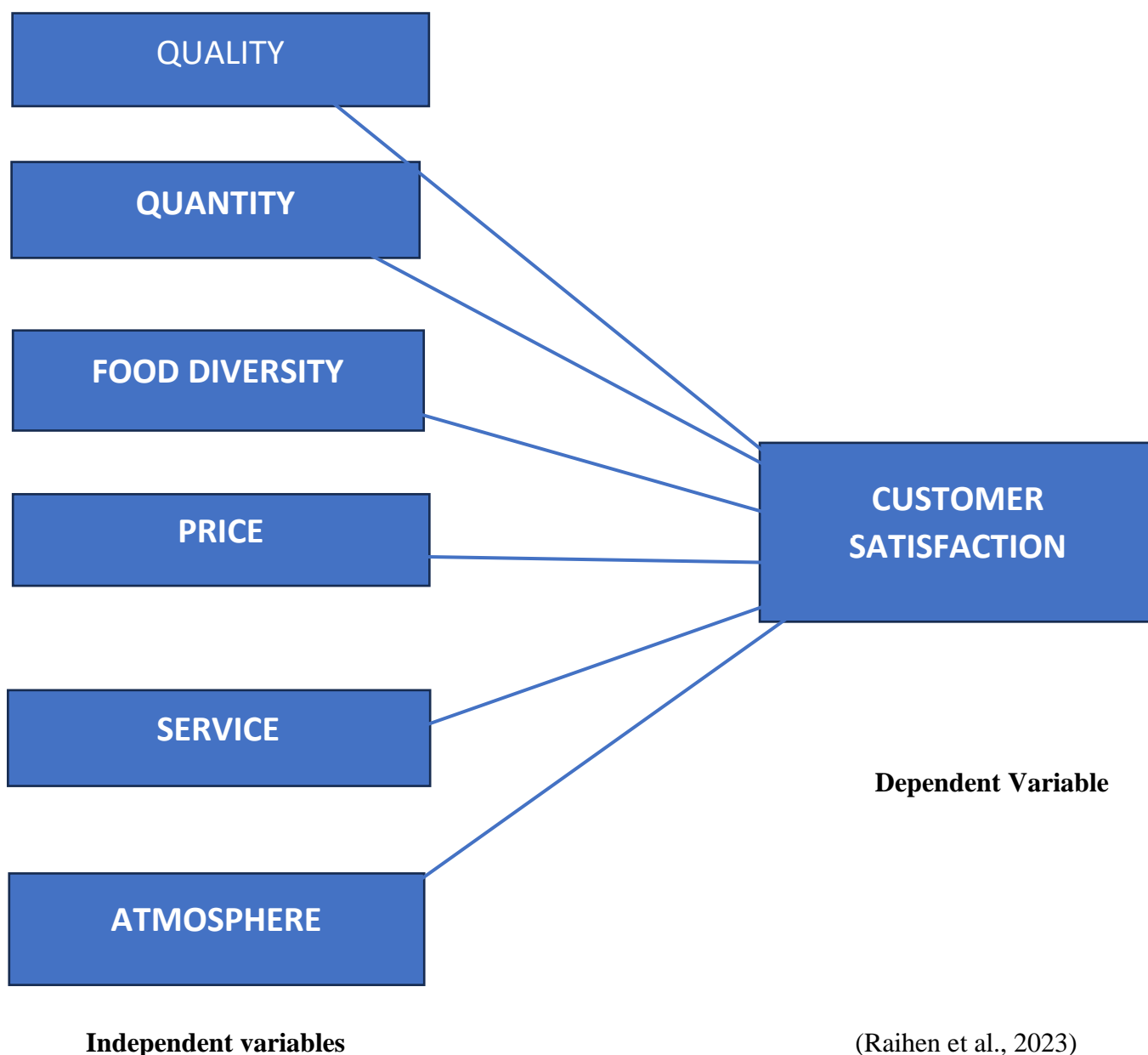


Fig: 1

(Ling Dyana Chang et al.,2014)

1.3 Significance of the study

The aim of this study is to assess the service of canteen by measuring the the level of customer satisfaction (student and staff), to identify the service problems, and proposed plan of action to solve the problems. Therefore, this study attempts to identify the relationship between the food quality, quantity, food diversity, price, staff performance, atmosphere and time schedule, of the university canteen.

1.4 RESEARCH QUESTION

Q1) What are the factors affecting the student satisfaction of the University canteen services?

Q2) What factors affect the teaching and non-teaching staff satisfaction of university canteen services?

Q3) A) Are the factors affecting students, teaching and non-teaching staff, have any association with demographic factors?

B) Are the factors affecting students, teaching and non-teaching staff, have any association with students from different blocks?

1.5 RESEARCH GAP

Similar study has not been done in Goa University

CHAPTER 2: LITERATURE REVIEW

The purpose of this study was to evaluate the canteen services provided by Sahid University in Jakarta. This study aims to ascertain the degree of contentment that patrons of the canteen have with the services provided, as well as to pinpoint any issues that arise. where 16 to 25-year-olds made up half of the clientele. Numerous guests had finished their final year of high school. More than 50% of guests at Sahid University are there occasionally. More than half of the customers are satisfied with the product data quality. More than half of patrons are happy with the taste, price, and serving size of the food and beverages served at the Sahid University, but more than half are unhappy with the hygienic conditions, selection, and product display. (Azni et al., 2019)

The purpose of this study was to look into the relationship between factors like cost, food quality, customer service, and the environment that makes students happy. A convenience sample of 250 pupils was used to obtain quantitative data. The results of the study showed a relationship between the four independent factors and students' satisfaction. The pleasure of the pupils was significantly and favourably impacted by all of the criteria. Regression analysis revealed that the two factors that had the most effects on student happiness were pricing justice and customer service, closely followed by atmosphere and meal quality. Additionally, it was determined that every independent component in the research had a significant impact on the dependent variable—student happiness. (Afroza & Haque, 2022). The main objective of this study is to investigate the features of food service in public university canteens. The findings suggest that three primary factors impacting student satisfaction are cost, food quality, and employee conduct. Cleanliness, responsiveness, and the surrounding environment are other important components. If those in charge of food services considered specific factors (food quality, food variety, pricing justice, ambiance, etc.), they could provide more value and satisfaction to Improve children's overall experience and satisfaction (Raihen et al., 2023). This study was conducted to determine the correlation between students' satisfaction and the university cafeteria's atmosphere, staff performance, price fairness, and food quality. A systematic, self-administered questionnaire was used to test the proposed hypotheses using the survey method. 93 undergraduate students in all were chosen using the convenience sampling technique to be questioned. Using the maximum likelihood estimation feature of the AMOS

21.0 computer program, the structural equation modelling (SEM) technique was used to get the results. Regarding the quality of the café service, the two main factors that affect students' happiness are food quality and pricing justice. Next, staff performance and atmosphere are not as important to the pupils. The outcomes were not what the prior study had shown. The university cafeteria needs to improve the meals in a significant way. (Ling Dyana Chang et al., 2014). The purpose of this study was to determine how satisfied students were with the food and drink offerings of the cafeteria and canteen in the Mukah Polytechnic region. The great degree of reliance that students have on the cafeteria and canteen makes this study significant. collect data from students based on the four variables—cleanliness, cost, wait time, and level of service provided by the cafeteria and canteen—that were chosen for this study. This survey indicates that students are quite happy with the standard, promptness, and cleanliness of the services. However, the price component had a relatively low mean score, indicating a modest level of satisfaction. (Beam et al., 2023) Students gave the three customer satisfaction items relatively low marks. The school food was scored lower than other things, especially when comparing dining at home vs eating at school, and the standard deviation was lower. Similarly, the majority of students would rather eat somewhere else than in the school canteen. The objective of the exploratory factor analysis was to determine the aspects of the perceived service quality that students believed to be present. (Lülf-Baden et al., 2008) Researchers have long been interested in the topic of student satisfaction. A number of studies examined issues related to food quality, variety, fairness in pricing, service quality, and the environment in which students feel satisfied with the meal service. It was believed that the study's findings will assist different university administrations in using various metrics to increase student satisfaction with their cafeteria offerings. According to the conducted research, customer satisfaction is determined by the consumer's perspective, expectations, and experiences after making a purchase. One important contributing element is that the restaurant's atmosphere is unsatisfactory, and the staff hasn't been able to establish a setting that speaks to the requirements of the patrons on a psychological, emotional, and cognitive level. A thorough understanding of the quantity, cost, and portion size will be taken into account overall. It is also true that lower prices correspond to lower expectations for the service. It is crucial to assess the meal quality in order to gauge how satisfied the kids are. The varsity café's quality of meal portion, cleanliness, selection of foods, and atmosphere all play major roles in patron happiness. (Afroza & Haque, 2022). In one study, a rating scale of 1 (bad) to 5 (excellent) was used to survey university diners about their services. A number of criteria were evaluated by students, including the waiting line (3.28), staff attentiveness (3.75), flavour (3.29), freshness

(2.83), and appearance (2.96). Students scored food quality 3.13 and service quality 3.25 in a different study that employed a similar grading system. The student union café was rated 5.39 as a good alternative dining choice and the food selection received a rating of 4.12 on a modified seven-point scale, which was used to evaluate a number of service aspects. (Raihen et al., 2023). A number of factors, including the canteen and cafe's cleanliness, cost, wait time, and service quality, are used to gauge how satisfied students are. 322 students from each academic area who completed the questionnaires were the respondents for this study. According to the report, there is a high degree of student satisfaction with the cafeteria and canteen food service. On the other hand, the price variable has a medium level of satisfaction and the lowest mean. On the other hand, the price element had a relatively low mean score, indicating a modest level of satisfaction.(Beam et al., 2023)

Customer Satisfaction

Customer satisfaction is defined as a customer's viewpoint based on expectations and subsequent post-purchase experiences. How effectively a product or service fulfils a customer's expectations determines how happy the consumer is with it. A person feels satisfied when their needs, wants, or expectations are met, and they also feel good about themselves as a result. Student satisfaction has long piqued the curiosity of researchers. Numerous studies looked at matters including food quality, variety, pricing justice, service quality, and the atmosphere that makes students feel happy about the meal service. The results of the study were thought to help various university administrations use different metrics to raise student satisfaction with their cafeteria offerings. (Afroza & Haque, 2022). The number of students attending higher education institutions is always increasing, which is increasing demand for food service, particularly in universities. Foodservice suppliers are under increased pressure to match the needs and expectations of students because of the intense competition. Because they have so many options, institutions sometimes struggle to retain students, which makes today's college students particularly dependent on them. (Raihen et al., 2023)

1) Food quality

When it comes to making a good impression and guaranteeing student satisfaction, food quality is a key component. It is thought to be crucial to the satisfaction of college students. The criteria for quality include consistency, size, texture, freshness, fragrance, taste, and presentation. These are the essential components involved in meeting and exceeding customers' expectations. In the previous study, a wide range of factors were investigated in relation to food

quality, such as freshness, presentation, ingredient quality, safety, portion, halal, texture, taste, menu variety, aroma, temperature, inventive menu items, hygiene, real food, health options, freshness, and nutrition. (Afroza & Haque, 2022)

Students at universities are directly impacted by the quality of food service in terms of their ability to lead fulfilling lives. In order to meet or exceed customer satisfaction and encourage repeat business, the overall food quality attributes of taste, freshness, and presentation are more crucial than other factors like price, value, convenience, and cleanliness. Food quality and customer satisfaction have a direct correlation when assessing students' satisfaction with cafeteria service. The characteristics of food that people deem acceptable are referred to as food quality. A multitude of basic sensory attributes are included in food appearance, such as colour, opacity, gloss, visual texture, and perceived flavour. Students' level of satisfaction with the university cafeteria is therefore greatly influenced by its standard, selection, cleanliness, and ambience. (Ling Dyana Chang et al., 2014) When gauging students' happiness with cafeteria service, food quality and customer satisfaction are closely linked. Food quality refers to the attributes of food that consumers find acceptable (McWilliams, 2000). Food appearance includes a number of fundamental sensory characteristics, including colour, gloss, opacity, visual texture, and perceived flavour (Imran, 1999). Thus, the quality, variety, cleanliness, and atmosphere of the university cafeteria have a major impact on how satisfied students are with it. (Ling Dyana Chang et al., 2014)

2) Quantity

A thorough understanding of the quantity, cost, and portion size will be taken into account overall. It is also true that lower prices correspond to lower expectations for the service. It is crucial to assess the meal quality in order to gauge how satisfied the kids are. The varsity café's quality of meal portion, cleanliness, selection of foods, and atmosphere all play major roles in patron happiness. (Haque and Afroza, 2022). A study by Klassen et al. (2005) found that price has an impact on students' purchase decisions. Based on the size of the portions and the total worth of the meal, a fair and appropriate pricing must be determined. A portion is the amount of food you decide to have at one sitting, whether it's at home, in a restaurant, or out of a box.

3) Food diversity

Food variety had a considerable beneficial impact on student happiness ($\beta = 0.222, < p = 0.05$), according to Xi and Shuai's (2009) findings. They also mentioned that the variety of food should be emphasized. For example, to prevent pupils from becoming dissatisfied with boring cuisine. A few other researchers made the hypothesis that the type of food served determines how satisfied customers are. Ahmed et al. (2017) recently claimed that menu variety predicts customer happiness. (Raihen et al., 2023)

4) Price fairness

Numerous academics have conducted numerous research on pricing fairness or price and worth. The assessment of the reasonableness or acceptability of an outcome and the method used to get at it is known as price fairness. The quality standard that should be required is determined by the cost of the service. Customer satisfaction is significantly impacted by perceived price fairness. Chang, Ling Dyana, et al. (2014). Cost has a significant impact on cafeteria meal satisfaction, and a recent study has further confirmed this (DK et al., 2020). When a product's total evaluation is based on what was received and what was given in exchange, price and value fairness occur. For students, affordable food is crucial, and it may serve as their primary motivation to return to a grocery store. Certain research has provided a very clear description of the beneficial relationship that exists between pricing and student happiness. Given that the majority of students originate from low-income families, the food services management should employ some economic strategies. For example, subtracting raw material costs, coming up with more energy-saving techniques, improving cost-control ideas, etc., to make the government more dependent on the students in order to provide for the students and their families. The goal should be to produce more food that is both affordable and nutrient-dense. (Afroza & Haque, 2022) Everyone knows that students have a limited budget, which influences their choice of foodservice because they presumably look for affordable options. In order to ensure that customers feel that the food and service they receive are worth their money, the price should be fair given the quantity of food served. This will increase student satisfaction. (Raihen et al., 2023).

5) Staff Service

The amount of client satisfaction at each food outlet is significantly influenced by the performance of the staff. Several researchers looked into what makes customers more likely to spread positive electronic word-of-mouth, and they found that the best predictor is actually service quality. Post-purchase behaviour is also influenced by two altruistic mediators: the desire to express gratitude to a restaurant for a wonderful dining experience and the expression of positive sentiments. Friendly gestures (such as smiles and greetings, as well as high levels of responsiveness, cleanliness, and swift service) and interactions between the cafeteria staff and students are crucial because they affect students' satisfaction with the quality of the services they receive. (Ling Dyana Chang et al., 2014)

The level of client satisfaction at each food outlet is greatly influenced by the performance of the staff. (Mui et al., 2014)

6) Atmosphere

With regard to the tangible components of the service environment, Bitner (1992) created the term "services cape." The ideal temperature, noise level, furniture, and layout make up the services cape, which influences client happiness and the degree of return business. Chang, Ling Dyana, et al. (2014). A common definition of atmosphere is the physical presence and gestural look that draw customers in and draw their attention to the entire space. One of the main things that attracts potential consumers to a restaurant is the ambience that it creates. Harmonious combinations of lighting, music, and scent can produce a pleasant dining atmosphere. (Afroza & Haque, 2022). Previous research has concurred on the importance of environmental variables or even mentioned them as one of the primary indicators for patrons evaluating the quality of a restaurant. The ambience and hygiene are important factors that affect how satisfied students are. (Raihen et al., 2023)

CHAPTER 3: RESEARCH METHODOLOGY

3.1 DATA COLLECTION AND SAMPLING METHOD

Mostly, this study is based on primary research. Both closed-ended and open-ended questions served as the foundation for an organized questionnaire. This study used a 270-person sample size and the convenience sampling approach. By delivering questionnaires to Goa University staff and students and gathering their responses, the survey method is used to gather data. Students from different university blocks as well as teaching and non-teaching staff members make up the responders. A total of 350 respondents were emailed Google forms and hard and questionnaire copies were distributed containing questions regarding the canteen's services in order to assist this study. of which just 304 responders really sent in their answers. Customers of the canteen (students, faculty, and non-teaching staff) make up the responders. Additionally, information regarding the kinds of food served at Goa University's canteen was gathered for this study. Three sections made up the questionnaire. The first one includes demographic information on gender, age, education level, occupation, frequency of visits, and monthly canteen expenses. The respondent's preferences and provisions for the canteen are the subject of part two, while customer satisfaction is the emphasis of part three. The questionnaire responses served as the basis for this study's conclusions. This survey employs the Likert scale approach, which displays a scale from 1 to 5. On each issue, the respondents were instructed to select one of five levels of satisfaction: entirely satisfied (5), satisfied (4), neutral (3), dissatisfied (2), and completely dissatisfied (1).

3.2 HYPOTHESIS DEVELOPMENT

H1: There is a significant positive relationship between food quality and customer satisfaction.

H2: There is a significant positive relationship between food quantity and customer satisfaction.

H3: There is a significant positive relationship between food diversity and customer satisfaction.

H4: There is a significant positive relationship between price and customer satisfaction

H5: There is a significant positive relationship between service and customer satisfaction

H6: There is a significant positive relationship between atmosphere and customer satisfaction

3.3 DATA ANALYSIS

Following the collection of the questionnaire, JAMOV software tabulated the responses to examine the demographics and use smart PLS to assess customer happiness and choice. The information is recorded in tables and visualizations. Smart Pls software will be used to analyse the outcomes

CHAPTER 4: ANALYSIS AND RESULTS

4.1. Descriptive statistics

The purpose of descriptive statistical analysis is to characterize the features of the measurement sample and the general population that the sample represents, as well as to analyse the numerous properties of a set of data. In order to determine the approximate situation of the sample, this study performs statistical analysis on the collected questionnaire data using Jamovi software.

Table 4.1.1

Characteristics	Frequency	Percentage
Gender		
Male	128	42.1 %
Female	176	57.9 %
Total	304	100%
Age		
18-25	171	56.3 %
26– 30	43	14.1 %
31 – 40	67	22.0 %
Above 40	23	7.6 %
Education		
Up to 10 th	3	1.0 %
Up to 12 th	11	3.6 %
Diploma	7	2.3 %

Graduation	66	21.7 %
Post Graduation	148	48.7 %
Ph.D.	69	22.7 %
Marital Status		
Married	87	28.6 %
Unmarried	217	71.4 %
Occupation/ Profession		
Students	181	59.5 %
Teaching staff	80	26.3 %
Non-teaching staff	39	12.8 %
Retired	4	1.3 %

Source: Compiled by author

Socio-demographic profile

Table 4.1.1 includes a broad examination of the age, gender, marital status, education, and occupation of the staff and students. The goal is to comprehend the demographics of the personnel and students who use the Goa University canteen. Table 1 above displays the sample structure. Table 1 shows that of the 304 valid questionnaires recovered, 42.1% of the respondents were men and 57.9% were women, indicating a tight gender split. The bulk of responders (56%) were in the 18–25 age range, followed by 14.1% in the 26–30 age range, 22% in the 31–40 age range, and 7.6% in the 40+ age range. According to the respondents' educational backgrounds, a sizable percentage hold either a professional degree (22.7%) or are post-graduate (48.7%). This suggests that respondents with comparatively greater levels of education are included in this sample. Additionally, a broad but mostly educated sample is suggested by the low representation of respondents with education levels of graduation (21.7%), diploma (2.3%), up to 12th grade (3.6%), and the least number of respondents with an educational background of (1.0%). According to the distribution of marital status, the

majority of respondents (71.4%) are single, while the remaining respondents (28.6%) are married. The majority of respondents were students (59.5%), followed by teaching personnel (26.3%), non-teaching staff (12.8%), and retired individuals (1.3%), according to the occupational profiles of the respondents.

Table 4.1.2

Name of the school	Frequency	Percentage
Goa business school	107	35.2 %
Shenoi Goembab school of languages and literature	16	5.3 %
School of chemical sciences	25	8.2 %
School of Sanskrit, philosophy and Indic studies	28	9.2 %
School of biological sciences and biotechnology	26	8.6 %
Manohar Parrikar school of law governance & public policy	12	3.9 %
School of earth, ocean and atmospheric sciences	25	8.2 %
School of physical and applies sciences	29	9.5 %
D.D. kosambi school of social sciences and behavioural studies	9	3.0 %
Administration block	27	8.9 %

Source: Compiled by author

The several Goa University schools to which the respondents are affiliated are shown in Table 4.1.2. Based on the information gathered from the questionnaire, we can determine that the majority of respondents (35.2%) were from GBS, followed by non-teaching staff members from the Administration block (8.9%), the School of Sanskrit, philosophy, and Indic studies

(9.2%), and the school of physical and applied sciences (9.5%). The D.D. Kosambi School of Social Sciences and Behavioral Studies had the fewest respondents (3.0%)

Table 4.1.3 Frequencies of variables

Do you visit university canteen?	Frequency	Percentage
Yes	298	98.0 %
No	6	2.0 %
Canteen visit		
Daily	51	16.8 %
10 times a month	81	26.6 %
10-20 times a month	49	16.1 %
More than 20 times	26	8.6 %
Rarely	97	31.9%
Monthly canteen expense		
Below 500rs	121	39.8 %
500-1000rs	72	23.7 %
1000-2000rs	54	17.8 %
2000rs and above	57	18.8 %

Source: Compiled by author

Table 4.1.3 above explains how frequently respondents visit the canteen. We can infer from the survey results that the vast majority of participants (98%) reported using the campus canteen, while a small minority claimed not to have used it at all.

In addition, 16.8% of respondents reported visiting the canteen every day, while 31.9% of respondents said they only visited it infrequently. Ten visits to the canteen per month were made by 26.6% of respondents, followed by visits between 10 and 20 times (16.1%) and more than 20 times (8.6%).

4.2. Data analysis

Table 4.2.1

	Completely dissatisfied	Dissatisfied	Neutral	Satisfied	Completely satisfied
Quality of food	15.1%	22.4%	26.6%	20.1%	15.5%
Nutritional factor	16.1%	25.3%	33.9%	20.4%	4.3%
Hygiene	16.8%	29.6%	35.9%	12.5%	5.3%
Quantity of food served	8.95	21.7%	33.6%	27.3%	8.6%
Quantity w.r.t price charged	11.8%	25.3%	33.6%	22.0%	7.2%
Variety of food products offered	13.5%	27.6%	23.4%	12.2%	23.4%
Availability of preferences	6.3%	17.1%	40.5%	27.6%	8.6%
Type of food products offered	9.9%	26.0%	37.2%	20.1%	6.9%
Food prices	7.6%	16.8%	40.8%	27.3%	7.6%
Staff service	9.5%	19.1%	35.5%	30.6%	5.3%
Staff attitude	10.2%	17.8%	38.8%	26.6%	6.6%
Atmosphere of the canteen	9.2%	18.1%	37.5%	28.0%	7.2%
Sitting arrangement/space	10.9%	18.9%	39.5%	23.0%	8.6%
First impression of the food served	12.2%	17.1%	42.8%	21.7%	6.3%
Overall canteen satisfaction	9.2%	28.0%	37.5%	18.1%	7.2%

Table 4.2.1 shows the diverse viewpoints held by staff and students, each represented on a 5-point Likert scale. The majority of staff members and students who responded to the poll expressed either neutrality or dissatisfaction with the amount, variety, quality, cost, and atmosphere of the staff and students. The majority of employees and students are dissatisfied with the food's quality, variety, and hygiene. According to the study's findings, the majority of students and employees who visit the university canteen are dissatisfied with the food's quality and lack of variety. We might infer from the preceding table that a greater percentage of respondents are dissatisfied with food diversity, quality, and hygiene. Reactions to the staff's attitude are mostly positive. The atmosphere and the cost of the food are satisfactory to the respondents. When it comes to overall canteen satisfaction, we can state that 28% of respondents are dissatisfied with the services provided generally, 37.5% of respondents are unsure about their level of satisfaction overall, and 18.1% of respondents are satisfied.

Table 4.2.2. Factor loadings

Constructs	Indicators	Outer loadings
Atmosphere	ATM1 <- ATM	0.83
	ATM2 <- ATM	0.894
Customer satisfaction	CS1 <- CS	0.932
	CS2 <- CS	0.908
Food diversity	FD1 <- FD	0.855
	FD2 <- FD	0.842
	FD3 <- FD	0.832
Food quality	FQ1 <- FQ	0.831
	FQ2 <- FQ	0.876
	FQ3 <- FQ	0.807
	FQ4 <- FQ	0.611
Food quantity	FQN1 <- FQN	0.862
	FQN2 <- FQN	0.902
Price	PR1 <- PR	1
Service	SER1 <- SER	0.889
	SER2 <- SER	0.865

Source: Compiled by author

In table 4.2.2. It displays a number of constructs, measured by indicators with matching outer loadings, they are Food quality (FQ), Food quantity (FQN), Food diversity (FD), price (PR), atmosphere (ATM), service (SER) and customer satisfaction (CS). Each indicator's loading shows how effectively it represents its construct; outer loadings above 0.70 are usually regarded as acceptable. There is need for some improvement even though the overall satisfaction scores appear to be high. Overall, the customers appear to be dissatisfied with most parts of the service, according to the data.

Table 4.2.3. Cronbach alpha, Composite reliability and AVE

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
ATM	0.659	0.68	0.853	0.744
CS	0.819	0.831	0.917	0.846
FD	0.798	0.806	0.881	0.711
FQ	0.788	0.799	0.866	0.621
FQN	0.716	0.729	0.875	0.778
SER	0.701	0.705	0.87	0.77

Source: Compiled by author

The above table 4.2.3. shows the validity and reliability of seven constructs Food quality (FQ), Food quantity (FQN), Food diversity (FD), price (PR), atmosphere (ATM), service (SER) and customer satisfaction (CS). The Cronbach's alpha and composite reliability ranges from 0.65 to 0.81 which is high and has strong internal consistency. The Average Variance Extracted (AVE) has a range between 0.62 to 0.84 which indicates that measures sufficiently captured the intended constructs. As it can be seen in the table, all the constructs have AVE value more than 0.50 which is considered as good.

Table 4.2.4. VIF

	VIF
ATM -> CS	2.411
FD -> CS	2.014
FQ -> CS	2.717
FQN -> CS	1.645
PR -> CS	1.685
SER -> CS	1.944

Source: compiled by author

In above table 4.2.4. it represents variance inflation factors (VIFs) data. VIF's measures the degree of multicollinearity between variables in a regression. In the table, most VIFs range from 1 to 2, although some are higher than 2. This implies that there might be some moderate multicollinearity, which could have an impact on the regression analysis's accuracy. To understand how these factors affect the model, it's essential to investigate the connections between these variables.

Table 4.2.5. R-square

	R-square	R-square adjusted
CS	0.621	0.614

R-square values show the extent to which an endogenous latent variable's independent latent variable accounts for its variance. R square values are classified as follows: >0.60 is high, 0.30 to 0.60 is moderate, and less than 0.30 is low. The proposed model's r-square value is 0.621, indicating that the factors influencing staff and student satisfaction can account for 62.1% of the variation. With a R Square of 0.621%, the suggested model is deemed to be quite satisfactory. **In table 4.2.5.** it shows the R-squares of dependent variable, customer satisfaction (CS). The R-square value of customer satisfaction is 0.621, explains for about more than half (62.1%) of the variance. The R-squared adjusted value, which adjust for factors, is 0.614. This implies that the model may be overfitting the data by only a slight margin.

Table 4.2.6. Structural model and hypothesis testing

To determine the relationship between the proposed model of the factors that impact on student and staff satisfaction with university canteen, structural equation modelling was conducted using smart PLS. The results of the path coefficient, p values are shown in the table 7. The results were extracted by using bootstrapping method by using (10000 samples). In this research the significance level used is 5%. When the p value is less than 0.005 means there is significant relationship between the independent variable and dependent variable.

Hypothesis	Constructs	Original sample (o)	Sample mean (m)	Standard deviation (stdev)	P values	Results
H1	FQ -> CS	0.291	0.293	0.072	0	Accept
H2	FQN -> CS	0.005	0.006	0.051	0.927	Reject
H3	FD -> CS	0.158	0.16	0.055	0.004	Accept
H4	PR -> CS	-0.013	-0.013	0.054	0.809	Reject
H5	SER -> CS	0.194	0.193	0.058	0.001	Accept
H6	ATM -> CS	0.288	0.285	0.072	0	Accept

The table 4.2.6. Shows whether hypothesis supports constructs with each other or not. Above its clearly show that, construct FQ->CS (H1), FQN->CS (H2), FD-> CS (H3), PR-> CS (H4), SER->CS (H5) and ATM->CS (H6). these constructs hypothesis is supported as t-value is greater than 1.96 at 5% level of significant. As a result, has significant relationship with patient satisfaction (CS). Food quantity (FQN) and price (PR) both had insignificant influence on students & staff satisfaction with university canteen. suggesting H2 and H4 are not supported.

Contribution to the Theory

Findings of this study contribute to the expectancy Disconfirmation Theory. According to this theory, consumers or in case of this research, students will have some expectation regarding the food or service they are going to receive from the university cafeteria. The reason for choosing this specific theory is that this expectancy disconfirmation theory has been used widely over long period of time. Besides that, the expectancy disconfirmation theory has been used for research related to satisfaction (Kivela et al., 1999; Sinha et al., 2019). Also, this theory has been already used for student satisfaction related research. (Afroza & Haque, 2022)

4.3 Findings

The university canteen's decision-makers are advised to consider a few ramifications based on the study's findings. Out of the six components examined in this study, four are determined to be significant for staff and student satisfaction; additionally, the data analysis supports the four hypotheses, rejecting the other two. It is proposed that these four considerations are given utmost importance while making decisions connected to the canteen. The two most important variables identified were the variety and quality of the food. Regarding food quality, the statement connected to hygiene had the highest mean, suggesting that hygiene has a significant influence on student satisfaction. To increase student & staff satisfaction by offering a wide range of meal options and enhancing hygiene. Furthermore, a better price should be set for food items in order to increase student happiness through food quantity and diversity. The results of the investigation also show that student and staff satisfaction is highly influenced by the quality of the food. As a result, food caterers need to pay attention to the freshness of their dishes and the quality of the products they utilize. Respondents' level of dissatisfaction with the food's taste indicated that the cafeteria management needed to pay close attention to the food's flavour.

4.4 Limitation and future scope

It is advised that further research on this subject be done with a bigger sample size and improved methods. It's also advised to carry out independent study on the various canteens in each block. University structures may also have a direct or indirect effect on employee and student happiness. This may also open up new avenues for study in the future. Furthermore, a more complicated model and a wider range of independent variables could be used in future research on this topic. It could be quite interesting to investigate multi-ethnicity and the influence of religion in the future. In the near future, it is hoped that this study will stimulate more research in the area of cafeteria and student happiness, leading to an enrichment of knowledge in this field. Additionally, a follow-up at a later date is required to ascertain whether a similar scenario persists or whether consumer satisfaction has changed in any way.

4.5 Conclusion and suggestions

A frequent feature present in practically all educational buildings is the canteen or café. A university is a type of educational setting where faculty and students frequently spend a great deal of time. These pupils have different tastes and choices because they are adults. The cafeteria is a facility that practically all students must use frequently, hence its significance is paramount. Ensuring that the pupils are more than happy and fulfilled could open the door for the entire educational establishment to leave a favourable impression on the kids. Both the institution's success and the comfort of the students may be enhanced by this. The purpose of this study was to investigate the issues regarding faculty and staff satisfaction with Goa's campus canteens. A structured questionnaire was used to collect the data, while Jamovi and Smart PLS tools were used for analysis. The results of the study demonstrated a substantial relationship between staff service, food variety, and quality and student satisfaction. These elements significantly improved student satisfaction and had a beneficial effect. Hopefully, this study will help the organizations in charge of administering the campus cafeterias develop their plans for better canteen services.

SUGGESTIONS FROM THE RESPONDENTS: (students and staff)

Many suggestions were submitted by the participants (students and staff). The questionnaire concluded with a set of open-ended questions, wherein the responders offered recommendations and other choices on the canteen. Many respondents advocated for higher food quality and quantity, while others claimed that hiring more staff members and chefs was necessary. Some people claimed that the quantity was extremely little given the price. Others suggested that a wider range of products with fewer oil-based ones should be offered. A few mentioned that there ought to be more snack alternatives available, a clean workspace, and clean personnel. Others stated Please add exhaust fans to keep the oppressive smoke from the cooking area out of the areas where people are sitting and eating. There should be healthy meals available. A few recommended installing CCTV cameras. As others proposed There should be a selection of cold drinks, snacks, and deserts. Head authority audits the meals in the canteen. Increase staffing, wipe tables more frequently, cook wearing a hat and gloves, provide takeout service, and upgrade ventilation. Particularly, wash the plates and utensils thoroughly with soap and then pat dry. Kindly provide nutritious fruit salads or thalis; they should be available but limited. There should only be one location for lunch, dinner should be served in the evening, and cafés should open on every block. Staff members should have their own area. food trucks on site, self-help organizations, upscale cafés. Cafe coffee day ought to be offered. limited but nutrient-dense options; additional room should be outsourced to eateries for juice, etc. ought to offer franchise chains, such as Monginis, etc. Food quality needs to be focused on nutrition and health care by using wholesome foods in clean settings.

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Gender	Male
	Female
Age	18-25
	26– 30
	31 – 40
	Above 40
Marital status	Married
	Unmarried
Occupation	Students
	Teaching staff
	Non-teaching staff
	Retired
Education	Up to 10 th
	Up to 12 th
	Diploma
	Graduation
	Post-Graduation
	Professional/PhD
Name of the school	Goa business school
	Shenoi Goembab school of languages and literature
	School of chemical sciences
	School of Sanskrit, philosophy and Indic studies
	School of biological sciences and biotechnology
	Manohar Parrikar school of law governance & public policy
	School of earth, ocean and atmospheric sciences

	School of physical and applies sciences
	D.D. kosambi school of social sciences and behavioural studies
	Administration block
Do you visit the university canteen	Yes
	No
How often you visit the canteen	Daily
	10- 20 times a month
	More than 20 times a month
	Rarely
Monthly Canteen Expense	Below 500rs
	500-1000rs
	1000-2000rs
	2000rs and above

APPENDIX I: DEMOGRAPHIC PROFILE AND QUESTIONNAIRE

No.	Variables	1	2	3	4	5
1	Food quality					
	I am satisfied with the food quality of canteen.					
	The canteen food is nutritious.					
	The canteen food is hygienic.					
	I am satisfied with the taste of the canteen food provided.					
2	Food quantity					
	I am satisfied with quantity (portion) of the canteen food served.					
	I am satisfied with the quantity with respect to the price charged.					
3	Food diversity					
	I am satisfied with the variety of food products the canteen offers.					
	I face problem in case of my preference towards veg, non-veg food.					

	I face problem with the taste and type of food products offered.					
4	Price					
	I am satisfied with canteen food prices.					
	Prices should be reduced					
5	Service					
	I am satisfied with canteen staff service.					
	Satisfied with staff attitude					
6	Location/atmosphere					
	I am satisfied with the atmosphere of the canteen.					
	The canteen is a suitable place to sit/ sufficient space					
7	Customer satisfaction					
	I am satisfied with the food served at the canteen.					
	I am satisfied with the overall canteen services.					

(1-Completely Dissatisfied,2-Dissatisfied, 3- Neutral, 4-Satisfied, 5-Completely Satisfied.)

Appendix 2: model

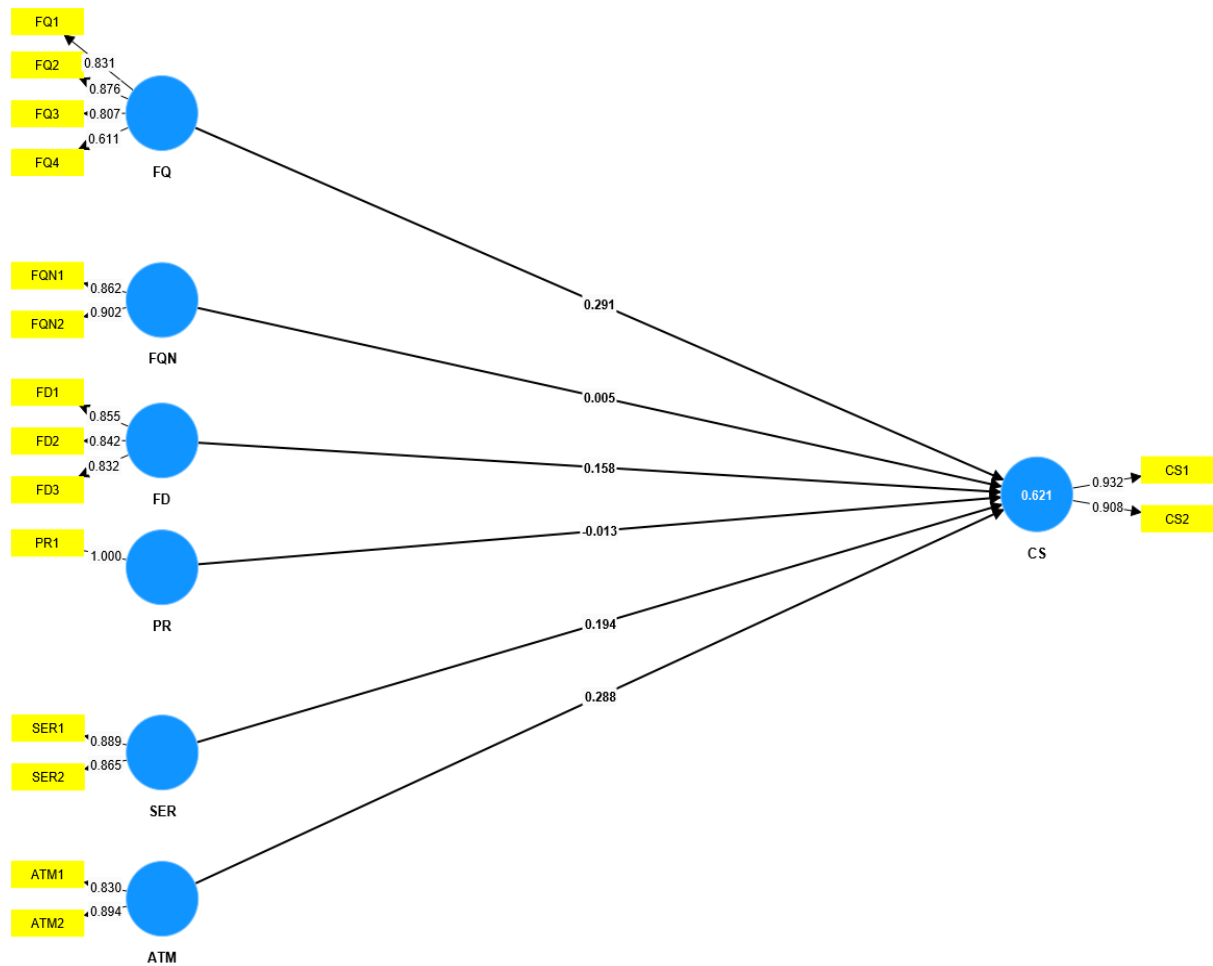


Fig. 2. Measurement Model

Source: Compiled by author

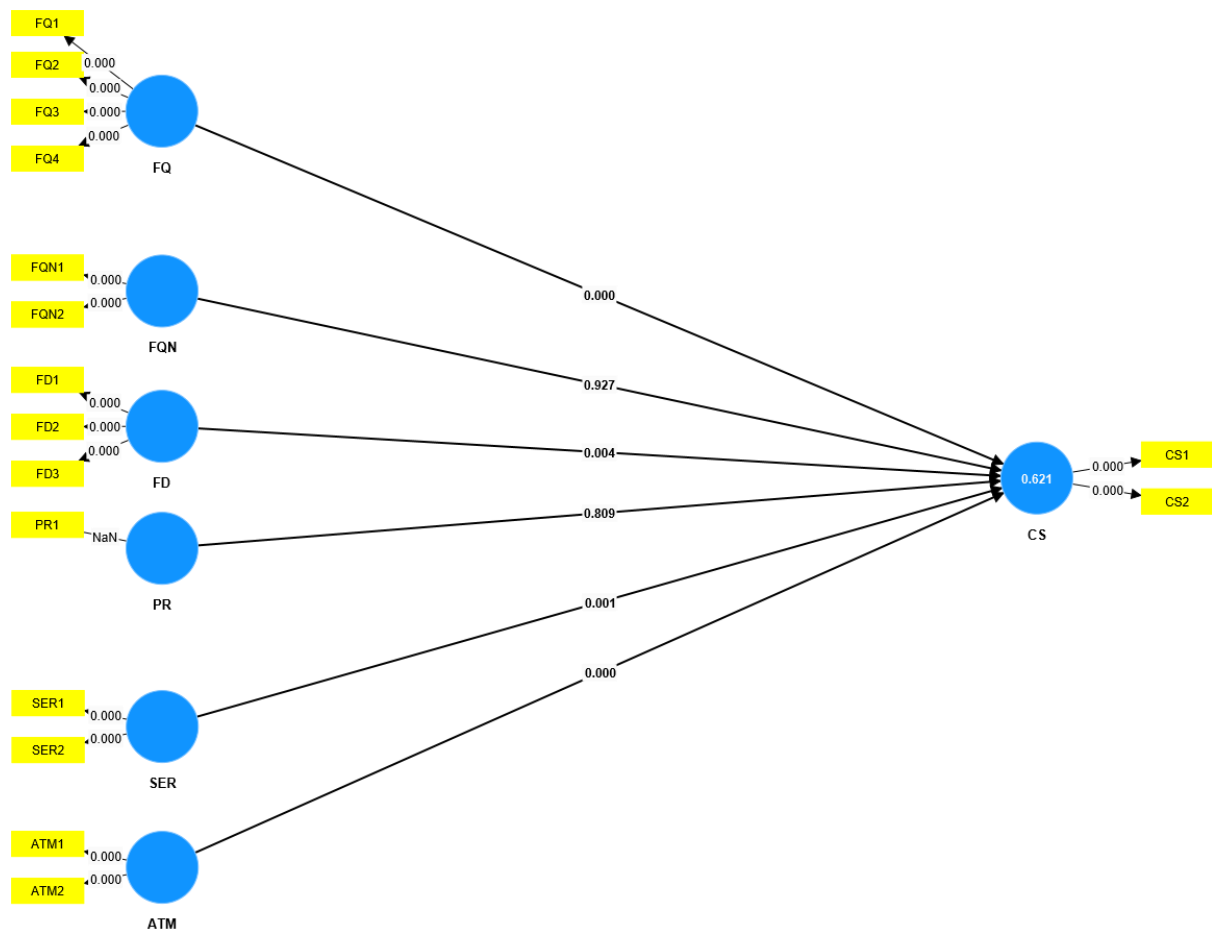


Fig. 3. Structural Model

Source: Compiled by author