

**ANALYSIS OF STUDENTS PREFERENCES IN CHOOSING  
RESTAURANT AROUND CAMPUS AREA**

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## **ABSTRACT**

Student growth in Indonesia are increasing from year to year rapidly, in Yogyakarta every year, thousands of students from various regions across Indonesia came to enroll in public universities and private universities or the other educational institutions.

With the large number of students in Yogyakarta, it has become a profitable business not only for educational institutions but also for the society of Yogyakarta, a wide range variant of businesses starting from stationery provider, boarding houses, restaurants, apparel, tutoring services and many more has created a big opportunity for all society to provide every need of the student and created a profitable business in both long term and short term.

Restaurant business in Yogyakarta is one of the very prospective investment because of the number of people who are growing rapidly day by day whether from students or tourist travelers. Yogyakarta provide the various types of food available ranging from traditional foods such as Gudeg, fast food restaurants, street food, fine dining it is all here. The food in Yogyakarta is also famous with the affordable price for students and other newcomers compare to other regions in Indonesia. Thus, restaurant business in Yogyakarta has a market with intense competition among the restaurant providers.

**Keywords:** student, preference, restaurant, campus area, analytic hierarchy process

## **INTRODUCTION**

### **Background**

Have you ever wonder when you are living as a student, you consider for the most important thing in a live, food? As a student, you might be thinking about which is better and faster way to get a food during your student time, most of student will choose to eating outside when you are not indigenously living in other region which is far away from home or even if you are origin from the same city with your campus, you might be thinking of eating outside rather than bring your lunch from home. In the end, we are not confused to choosing what is better as long we can manage our time to become more flexible and efficient.

The main question now is when people asking you about what kind of food provider or restaurant you might choose between your lunch time, what is your preferences, right? Most of student will just bring an answer that they will prefer closest restaurant around their campus area or even just at the campus canteen.

In this study, we will try to learn about the preferences of student in choosing restaurant in the campus area, there are many student everyday eating outside because majority of them are living in the boarding house and only few of them are indigenously live in Yogyakarta and living near their campus. Student are likely eating outside because it is more simple and time efficient rather than cook it by themselves in boarding house or bring food from home.

Thus, the important thing is that we need to find out what kind of eating place or restaurant and their preferences about what will be most likely visited by the student around their campus area.

### **Problem Identification**

Based on the description that has been discuss in the background, then the formulation of the problem that had been developed in this study are:

1. What is student preferences in choosing restaurant around campus area?
2. What factor determine student alternatives in choosing restaurant around campus area?

### **Research Objectives**

Based on problem identification mentioned above, the research objectives are:

1. To find out what is student preferences in choosing restaurant around campus area.

2. To investigate what factor determine student alternatives in choosing restaurant around campus area?

### **Research Purposes**

The expected purpose of this research is to give benefit information for:

1. Have a knowledge about student preferences and alternatives of restaurant around campus area in Yogyakarta city.
2. Result can be useful for society of Yogyakarta as consideration if they are planning to startup a restaurant around campus area.

### **LITERATURE REVIEW**

Restaurant selection may depend upon person's age, sex, education level, social statue, knowledge of nutrition, experience on restaurants, convenient period of time, income, political view, religion, etc. Therefore, restaurant selection should be specified in some determined customers. (Ceyhun C.K, Mustafa Semiz, Elif Katircioglu and Cagatay Unusan., 2013)

In this chapter, we will examine the fundamental theory of the research and study of analyzing student preferences in choosing restaurant around campus area. This chapter will also give specific information about instrument or variable that have a role in order to determine the student preferences of choosing restaurant around campus area.

#### **Theoretical Review of Preference**

A preference is a technical term in psychology, economics and philosophy usually used in relation to choosing between alternatives: someone has a preference for A over B if they would choose A rather than B.

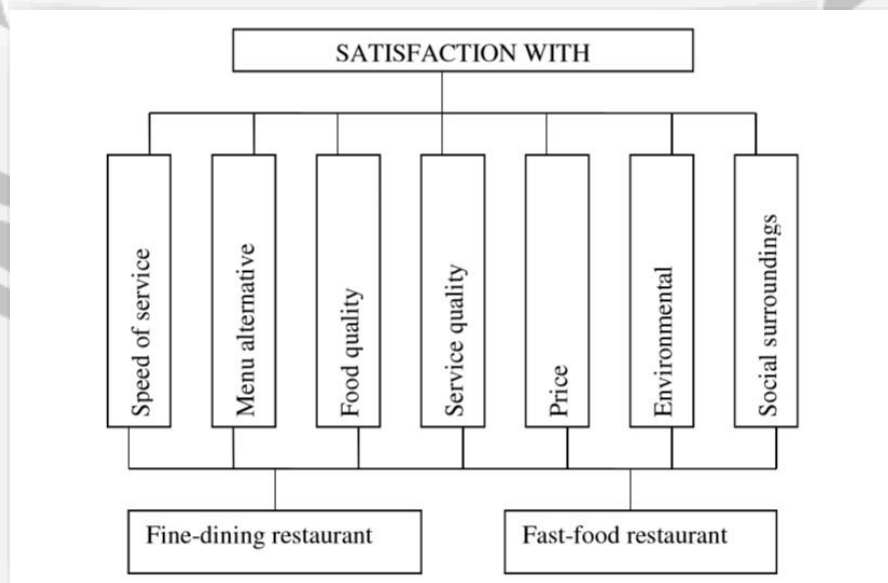
In psychology, preferences could be conceived of as an individual's attitude towards a set of objects, typically reflected in an explicit decision-making process (Lichtenstein & Slovic, 2006). Alternatively, one could interpret the term "preference" to mean evaluative judgment in the sense of liking or disliking an object (e.g., Scherer, 2005) which is the most typical definition employed in psychology. However, it does not mean that a preference is necessarily stable over time. Preference can be notably modified by decision-making processes, such as choices (Brehm, 1956; Sharot, De Martino, & Dolan, 2009), even unconsciously (see Coppin, Delplanque, Cayeux, Porcherot, & Sander, 2010). Consequently, preference can be affected by a person's surroundings and upbringing in terms of geographical location, cultural background, religious beliefs, and education. These factors are found to affect preference as repeated exposure to a certain idea or concept correlates with a positive preference.

### Important Criteria for Student in Selecting Restaurant

Based on the previous research from Ceyhun C.K, Mustafa Semiz, Elif Katircioglu and Cagatay Unusan. (International Journal of Economic Perspectives, 2013, Volume 7, Issue 2, 5-10), there are seven factors or criteria that contribute to the goal in determining the student preferences in choosing restaurant around campus area, as follow:

- Speed of Service: On time service, on time payment and the speed of their process.
- Menu Alternatives: Variety of menu according to nourishment, religion, culture, taste and price.
- Food Quality: Freshness, image, adequate cooked.
- Service Quality: Consistency of price, service and hospitality.
- Price: Suitable and invariable price.
- Environmental Ambiance: Cozy, comfortable, relaxing, safe, confidential.
- Social Surroundings: To see and to make friends, social activities.

**Figure 1.** AHP Structuring of the restaurant choosing problem



**Source:** *International Journal of Economic Perspectives*, 2013, Volume 7, Issue 2, 5-10.

## **Analytic Hierarchy Process**

AHP is a method for ranking decision alternatives and selecting the best one when the decision maker has multiple criteria (Saaty and Vargas, 2001 and Taylor, 2004). In AHP, preferences between alternatives are determined by making pair wise comparisons. The application of the AHP to the complex problem usually involves two major steps (Cheng, et al, 1999):

- Break down the complex problem into a number of small constituent elements and then structure the elements in a hierarchical form,
- Make a series of pair wise comparisons among the elements according to a ratio scale,

The fuzzy AHP technique can be viewed as an advanced analytical method developed from the traditional AHP (Chang, 1992, Chatterjee and Mukherjee, 2010).

The AHP was developed by Saaty and has been identified as an important approach to multi-criteria decision making problems of choice and priority.

The AHP procedure is applicable to individual and group decision settings. There are four ways to set the priorities: consensus, vote or compromise, geometric mean of individuals' judgments and separate models or players (Dyer and Forman, 1992). If consensus cannot be reached, the group may then choose to vote or compromise on a judgment. If a consensus cannot be achieved and the group is unwilling to vote or to compromise, then a geometric mean of the individuals' judgments can be calculated (Lai, Wong and Cheung, 2002).

## **AHP in Application**

The first step in the analytic hierarchy process is to model the problem as a hierarchy. In doing this, participants explore the aspects of the problem at levels from general to detailed, then express it in the multileveled way that the AHP requires. As they work to build the hierarchy, they increase their understanding of the problem, of its context, and of each other's thoughts and feelings about both.

The AHP converts these evaluations to numerical values that can be processed and compared over the entire range of the problem. A numerical weight or priority is derived for each element of the hierarchy, allowing diverse and often incommensurable elements to be compared to one another in a rational and consistent way. This capability distinguishes the AHP from other decision making techniques.

In the final step of the process, numerical priorities are calculated for each of the decision alternatives. These numbers represent the alternatives' relative ability to achieve the decision goal, so they allow a straightforward consideration of the various courses of action. (Saaty, 2008)

## **RESEARCH METHODOLOGY**

### **Population**

The population refer to the entire group of people, events, or things of interest that the researcher wishes to investigate. It is the group of people, events, or things of interest for which the researcher wants to make inferences (based on sample statistics). (Sekaran and Bougie, 2013: 240).

The population for this research are active university student in Yogyakarta city which is live in the both boarding house and indigenous student from Yogyakarta.

### **Sampling**

Sampling is the process of selecting units (e.g., people, organizations) from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen. (William M.K.T., 2006).

In this case, we will try to make it simple, rather than collecting data from all university student all around Yogyakarta, we will use sample from just student who lived around Babarsari and Seturan campus area which also well-known as major of campus area with many institutions such as Universitas Atma Jaya Yogyakarta, Universitas Pembangunan Negeri Veteran, Sekolah Tinggi Teknologi Nuklir BATAN, Universitas Proklamasi 45 and STIE YKPN.

The reason for using sample, rather than collecting data from the entire population, are self-evident. In research investigations involving several hundred and even thousands of elements, it would be practically impossible to collect data from, or test, or examine every element. Even, if it were possible, it would be prohibitive in terms of time, cost, and other human resources. Study a sample rather than the entire population is also sometimes likely to produce more reliable results. (Sekaran and Bougie, 2013:242-243).

### **Data Collection Methods**

The data collection methods in this study will using questionnaire as primary resource data from student correspondent around campus area in Babarsasi and Seturan. Questionnaire is a preformulated written set of questions to which respondents record their answers, usually within rather closely defined alternatives. (Sekaran and Bougie, 2013: 147). We use questionnaire because it can establish rapport and motivate respondent, doubts can be clarified, less

expensive when administered to group of respondent, almost 100% response rate ensured and anonymity of respondent is high.

The questionnaire will be conducted using the software of Expert Choice 11 automatically after we input the data of goal, criteria and alternatives based on Analytical Hierarchy Process (AHP) methods and it will distribute to 70 correspondence of student in campus area around Babarsari and Seturan.

### **Data Analysis Methods**

After the data, have been collected from a representative sample of the population, the next step is to analyze them to test the data. These helps to ensure that data is accurate, complete, and suitable for further analysis.

Analysis is an activity to take advantage of the data so that it can obtained a truth or untruth of a hypothesis. Imagination and creativity are necessary in order to analyze the tested data including the ability of researchers to make sense of something.

First, we have to input the collected data from questionnaire to the Expert Choice Software, after the data has been inputted, we can make some analysis from the result to test whether the data are good or not. There are two types of data analysis methods, quantitative and qualitative data analysis. In this study, we will use quantitative data to analysis the accuracy of the data source from determining the Consistency Ratio according to the AHP methods from Thomas Saaty, we can calculate it by dividing the Consistency Index (CI) and Random Index (RI) but, since we are using Expert Choice software, they will automatically be calculated and we will just analyze it after the questionnaire data has been inputted.

### **Analysis Tools**

The analysis tools that been used in this study are software from Expert Choice 11. This tools can provide data analysis result just by entering the data from the conducted questionnaire and it will be calculated by the program in accordance with Analytical Hierarchy Process (AHP) methods after we input the goal, criteria and alternative.

After the result came out we will combine a matrix in accordance with AHP from the criteria importance vector and alternatives importance vector. Thus, we will get the analysis and make a conclusion from the result.

## **FINDING AND RESULT**



## Data Collection Result

The data are collected from both gender male and female student at Babarsari and Seturan area by distributing the questionnaire to the student directly on the spot whether in campus and major eating place around the campus area. The questionnaire distributing method are to make sure first that the correspondence are university student or other same level institutions so that, we can get the qualified data directly from the student for research purpose.

The all data are collected from different university student in this area and the result is quite shocking because there are some students who fill the questionnaire are not from university in the area of Babarsari and Seturan, some of them are from Yogyakarta State University, Gadjah Mada University and Sanata Dharma University students by accidentally right on the spot where the questionnaires are distributed. This might help to increase the level of research specifically in the sampling method because it increased the range of research not only student in University around Babarsari and Seturan but wider.

## Analysis

After we doing research and collecting the questionnaire data from the 70 correspondence, we input the data to the software of Expert Choice and fill the questionnaire assessment and it will calculate the result consist of criteria importance vector and alternative importance vector complete with the consistency ratio. The data are collected from 70 so, we have to input the assessment manually one by one and note the result on excel thus, we will use it features to getting the mean or average data result from those correspondences. The mean or average result of both criteria and alternative important vector result will be calculated using matrix on excel also.

## Criteria Importance Vector

Criteria importance vector is the result from goal assessment of all criteria with the target of student preferences in choosing restaurant around campus area we can see on table below.

| Speed of Service | Menu Alternative | Food Quality | Service Quality | Price | Environmental Ambiance | Social Surroundings |
|------------------|------------------|--------------|-----------------|-------|------------------------|---------------------|
| 0.141            | 0.114            | 0.185        | 0.064           | 0.321 | 0.125                  | 0.051               |

**Table 1.** Criteria Importance Vector

Thus, from the result we might conclude that the student preferences around campus area in Babarsari and Seturan are determined by the first important point is the price with highest percentage and the second are food quality, speed

of service, environmental ambiance, menu alternative, service quality and social surrounding respectively.

### Alternative Importance Vector

The alternative importance vector is the result from pair wise of two alternative restaurants between fine-dining and fast-food with respect to each criteria of speed of service, menu alternative, food quality, service quality, price, environmental ambiance and social surroundings we can see on table below.

**Table 3.**  
Importance

Alternatives  
Vector

|                               |             |       |
|-------------------------------|-------------|-------|
| <b>Speed of Service</b>       | Fine-Dining | 0.114 |
|                               | Fast-Food   | 0.886 |
| <b>Menu Alternative</b>       | Fine-Dining | 0.710 |
|                               | Fast-Food   | 0.290 |
| <b>Food Quality</b>           | Fine-Dining | 0.798 |
|                               | Fast-Food   | 0.202 |
| <b>Service Quality</b>        | Fine-Dining | 0.787 |
|                               | Fast-Food   | 0.213 |
| <b>Price</b>                  | Fine-Dining | 0.165 |
|                               | Fast-Food   | 0.835 |
| <b>Environmental Ambiance</b> | Fine-Dining | 0.748 |
|                               | Fast-Food   | 0.252 |
| <b>Social Surroundings</b>    | Fine-Dining | 0.631 |
|                               | Fast-Food   | 0.369 |

From the result above we can conclude that when it comes about speed of service and price, student will prefer for fast-food restaurant, and for menu alternative, food quality, service quality, environmental ambiance and social surroundings, student will prefer for fine-dining restaurant.

### Matrix of Important Criteria Vector and Alternative Vector

After we see the result of alternative importance vector comparison between two restaurants of which is mostly choose by student in accordance with each criterion, now we will make a matrix calculation so we can finally get the result of which alternatives are preferable between fine-dining and fast-food restaurant.

The formula is  $IA = S \cdot CIV$ , where IA is important alternative, S is alternative dimension matrix and CIV is the criteria importance vector. (Saaty and Vargas, 2001)

$$S =$$

|       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|
| 0,114 | 0,710 | 0,798 | 0,787 | 0,165 | 0,748 | 0,631 |
| 0,886 | 0,290 | 0,202 | 0,213 | 0,835 | 0,252 | 0,369 |

$$CIV =$$

|       |
|-------|
| 0,141 |
| 0,114 |
| 0,185 |
| 0,064 |
| 0,321 |
| 0,125 |
| 0,051 |

$$IA = S * CIV =$$

0,47

0,53

Thus, the result is 53% of student will strongly choose fast-food restaurant and 47% will choose fine-dining restaurant. Furthermore, the 70-correspondence data can be seen on appendix for both criteria and alternative importance vector.

## CONCLUSION

### Conclusion

Based on the research in the field after we collecting data and making simple calculation, we can conclude that student preferences in choosing restaurant around campus area in several points below:

- For the student preferences in choosing restaurant around campus area, the mainly important criteria points are the price with highest percentage and the second are food quality, and the third are speed of service. From this result, we can conclude that student is always considering the price of food that they would like to consume but still get the best quality food means for the cleanliness, hygienist, fresh and with fast service to deliver their food.
- For the provided alternatives restaurant, when it comes about speed of service and price student will prefer for fast-food restaurant, and for menu alternative, food quality, service quality, environmental ambiance and social surroundings, student will prefer for fine-dining restaurant. Thus, the matrix result which is calculated by combining the criteria and alternative result, overall student will choose fast-food compare to fine-dining restaurant with percentage presented in previous chapter.
- Finally, if the society of Yogyakarta especially around the campus area and would like to start up a restaurant business, the result above can be used consideration to identify what most important thing should be providing for the student need of preferences in choosing restaurant around campus area.

### Study Limitation and Suggestion

The study limitation in this study are in determining the consistency ratio, the consistency ratio according to AHP method are equal or less 0,10 however, the result of 70 correspondence result using geometric mean is 0,38 this might happen because we are using a lot more criteria which is seven criteria and it becomes more difficult to stick with the consistency of the correspondences, but if we would like to use the consistency ratio, we might add weighted value of consistency level by increased it 0,10 up to 0,40 thus, the consistency ratio might be reach, however it does not necessary for this study.

In the future research, I personally suggest that the number of criteria can be increased, also the alternative maybe by adding more variant of restaurant such as, street food, traditional food, and mini restaurant (e.g. burjo and angkringan). The sampling itself should dividing the type of student for example, by the budget, origins, gender and social class.

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