

FACTORS THAT AFFECT FAST FOOD CONSUMPTION BEHAVIOR OF STUDENTS IN SMA NEGERI “X” SURABAYA INDONESIA

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ABSTRACT

Background: The era of Globalization creates a consumerism condition and new lifestyle in the society. Society especially senior high school age teenagers prefer to consume fast food because it is simple and does not spend much time besides the crowded activity. Consuming fast food in often frequencies can cause negative impact for the health, such as risk of obesity and other degenerative diseases. This research aims to analyze the factors that affect fast food consumption behavior of students in SMA Negeri “X” Surabaya.

Materials and Methods: This research uses quantitative research approach, observational analytic and cross sectional research design. The total of respondents are 85 students out of total population of 377 students with simple random sampling. Dependent variable is fast food consumption behavior, and independent variables are gender, allowance, behavior intention, social support, and accessibility of information.

Result: The results of simple logistic regression test shows that allowance ($p=0.008$), behavior intention ($p=0.010$), and social support ($p=0.000493$) affect to fast food consumption behavior, but gender ($p=0.201$) and accessibility of information ($p=0.165$) do not affect to fast food consumption behavior. So, from the result the researcher will give some recommendation to decrease fast food consumption behavior.

Conclusion: The school where the students study shall give health education about consuming the healthy foods and build a collaboration with Puskesmas (First Health Facility in Indonesia) and the health department to help the implementation of health promotion strategies in school. Health education aims to decrease the high frequencies of student’s fast food consumption behavior and consuming healthy foods instead. Such as, create more interesting health promotion medias for the students. In addition, parents shall do allowance monitoring and provide healthy foods for their son and daughter.

Keywords: affect, behaviour, consumption, factor, fast food,

1.0 Introduction

The era of globalization is characterized by the development of technology that can not be dammed, so it created a new consumerism condition and new lifestyle in community. Lifestyle in nowadays among the community is become one of the causes of shifting people's diet to be more happy to consume fast food as a daily consumption. Fast food consumption is considered more practical and does not spend much time in the middle of activity (Andriani & Wirjatmadji, 2012).

Fast food is a food that is partly or wholly prepared for fast-paced sales and service, usually at a snack or restaurant store (Libal, 2015). According to Sharkey (2011) states that fast food is a food that is characterized by low cost, large portion sizes and energy-dense foods that contain high calories and high fat. The result of Riskesdas or basic health research in Indonesia (2013) states that risky food consumption behavior is a consumption behavior of sweet, salty, fatty, baked, preserved and flavored foods with one or more times a day and three times a week. Referring to the explanation, fast food consumption behavior was one of the riskfull behavior eating.

1.1 Fast Food Consumption Behavior in Adolescence

This study was conducted in adolescence because adolescence is a period where individuals more easily follow the flow of changing times to modern era (Proveranti, 2010). Growth and development in adolescence occurs during puberty. Teenagers experience many changes during puberty, one of which is the change of eating habits into unhealthy foods. These unhealthy food habits will occur in adolescent nutritional problems (Aji, 2016).

One of the effects of nutritional problems in adolescents due to fast food consumption is an increase in obesity rate, especially adolescents in urban areas. According to Riskesdas data in 2013 it is known that there is an increase in prevalence of obesity in adolescent of high school age (16-18 years) from 1.4% in 2007 to 7.3% in 2013. Wahyuni research (2013) stated that adolescents suffering from obesity caused by often consuming fast food that is equal to 37.8%. Adolescents with frequent frequent consumption of fast foods are 6 times more likely to be obese than teenagers who do not often eat fast food (Arlinda, 2015). Obesity is one factor of the occurrence of hypertension. According to The Framingham Hearth Study, 65% of hypertensive risk factors in women and 78% in men are closely related to obesity (Wolk, 2003).

1.2 The Effects of Excessive Fast Food Consumption

Excessive consumption of fast food can cause some negative effects on health. Some degenerative diseases such as heart disease, type 2 diabetes mellitus, hypertension, cancer and obesity can be triggered by several factors such as fast food consumption with excessive frequency. Some of these degenerative diseases eventually become public health problems, especially nutrition problems (Khasanah, 2012). According to Boenga (2011) mentioned that one that is considered possible to trigger cancer is additive content in fast food. One of the additives that cause negative effects for health when consumed in excessive amounts and frequent frequencies of MSG (Monosodium Glutamate). MSG was found in several types of fast food such as fried chicken, french fries, burgers, and instant noodles. MSG is consumed continuously will settle in the body and can trigger the occurrence of cancer. In addition to

flavor ingredients, some fast foods also contain high salt, commonly called sodium and potassium. Excessive salt consumption can be one of the triggers of hypertension (Boenga, 2011).

1.3 Encouraging Factors of Fast Food Consumption in Adolescents

Based on the explanation of some of the consequences that may arise due to consuming fast food is too excessive, it can be known some of the causes, among others, as follows. First, the selection of fast food by adolescents is influenced by the invitation or encouragement from the student's friends to join in a fast food restaurant either just hanging out or to do the task. Second, the cause of consuming fast food in adolescents was they have the ability to buy with an average allowance of high school students is Rp 5000 to Rp 43000 (Nusa & Adi, 2013). Third, male teenagers more often consume fast food than girls. So the sex is considered to affect eating behavior in adolescents (Vilanty, 2014). Fourth, the factors that affect fast food consumption in adolescence is the intention. The intention of adolescents to consume fast food is influenced by the interest and desire to consume fast food for practical reasons, fast and nowadays among teenagers (Hanum, 2014) and to meet the need to eat both breakfast, day and night (Wahyuni, 2013). Fifth, exposure to fast food advertising media is increasingly, so that school age teenagers can easily persuade with the ads that offer fast food without knowing the effects (Putri, 2013).

1.4 SMA Negeri "X" Surabaya as Research Location

This research was conducted in Surabaya, because Surabaya is one of big cities in Indonesia that has function as Indamardi city (Industry, Trade, Maritime, and Education) (Adi, 2014). The function of industry and trade in Surabaya becomes a big opportunity for fast food industry to make Surabaya become the target of fast food sales. This can be known by the proliferation of fast food restaurants in Surabaya. Consumers of fast food in Surabaya consists of various layers of society one of which is a school-age teenager. SMA Negeri "X" Surabaya is one of the schools located in downtown Surabaya that is located at Jalan Wijaya Kusuma 48, Ketabang, Genteng, Surabaya. Located in the city center, SMA Negeri "X" Surabaya is surrounded by many fast food restaurants. Compared to the other three SMAs in the area, SMA Negeri "X" Surabaya is the nearest and most strategic distance with several places that sell fast food. Less than 100 meters away, there are crowded eating places and \pm 300 meters from the location of SMA Negeri "X" Surabaya there is a big shopping center in Surabaya. The purpose of this study is to analyze several factors that influence fast food consumption behavior in students in SMA Negeri "X" Surabaya. Some of these factors include gender, allowance, intention, social support (social support), and accessibility of information (access to information).

2.0 Materials and Methods

This research uses a quantitative research approach and is an observational study where researchers only make observations on the subject of research (respondents) without giving treatment. This type of research is a type of analytical research to analyze several factors that influence fast food consumption behavior. This research uses cross sectional research design.

This research was conducted on the students in SMA Negeri "X" Surabaya in november 2017 until May 2018. The research samples were active students in second grade of Senior High School of 2017/2018 academic year. The number of research samples were 85 people from the total population of 377 people. Determination of sample using random sampling technique, that is choosing respondent randomly but with the same proportion according to number of student in each class.

Dependent variable in this research is fast food consumption behavior. The independent variables in this study consist of gender, allowance, behavior intention (intention), social support (social support), and accessibility of information (access to information). Data collection has done by distributing PSP (explanation before collect the data), informed consent, and questionnaire to prospective respondents. Furthermore, the respondent should ask permission to the parents for the willingness to be a respondent. If the respondent's parents permit, the prospective respondent can be the respondent in this research. Respondents filled out questionnaires with self-administered technique.

Data processing done with several stages of editing, coding, entry, and tabulating. Data were analyzed in two stages: univariate analysis and bivariate analysis. Univariate analysis has done to get the results of the frequency distribution of each variable. The bivariate analysis has done by cross tabulation and simple logistic regression test between dependent variable with independent variable one by one.

3.0 Result

3.1 Frequency Distribution of Respondent's gender

Total respondents were 85 respondents consisting of second grade of Senior High School identified by their gender as follows:

Table 1 : Frequency Distribution of Respondent's gender

Gender	Frequency	Persentation (%)
Male	32	37.6
Female	53	62.4
Total	85	100

Table 1 shows that the frequency of male and female respondents corresponds to the ratio of males and females in the population is 2:3. The number of female respondents was more than half the total number of respondents or samples.

3.2 Frequency Distribution of Respondent's Allowance

Table 2 : Frequency Distribution of Respondent's Allowance

Allowance	Frequency	Persentation (%)
Low (<Rp 35000)	56	65.9
High (≥Rp 35000)	29	34.1
Total	85	100

Table 2 shows that respondents who have low allowance are more than respondents who have high allowance. But the difference in the amount of allowance the respondent does not have a far difference or can be said to have the same average allowance.

3.3 Frequency Distribution of Respondent's Behavior Intention

Table 3 : Frequency Distribution of Respondent's Behavior Intention

Behavior Intention	Frequency	Persentation (%)
Low	39	45.9
High	46	54.1
Total	85	100

Table 3 shows that respondent intention in consuming fast food was high with percentage 54,1% from total 85 respondent, whereas respondent with low intention is 45.9%.

3.4 Frequency Distribution of Respondent's Social Support

Table 4 : Frequency Distribution of Respondent's Social Support

Social Support	Frequency	Persentation (%)
Weak	53	62.4
Strong	32	37.6
Total	85	100

Table 4 shows that social support for respondents is relatively weak with 62.4% of total 85 respondents, while respondents with strong social support is 37.6%.

3.5 Frequency Distribution of Respondent's Accessibility of Information

Table 5 : Frequency Distribution of Respondent's Accessibility of Information

Accessibility of Information	Frequency	Persentation (%)
Rarely	5	5.9
Often	80	94.1
Total	85	100

Table 5 shows that the majority of respondents with a percentage of 94.1% have frequent information access about fast food. While respondents who rarely access information about fast food only amounted to 5.9%.

3.6 Factor Analysis of Affecting Fast Food Consumption Behavior

Table 6 : Factor Analysis of Affecting Fast Food Consumption Behavior

Variables	Fast Food Consumption Behavior		Sig.	OR
	Consuming fast food	Did not consuming fast food		
Gender			0.201	0.559
Male	16 (18.8%)	16 (18.8%)		
Female	34 (40%)	19 (22.4%)		
Allowance			0.008	0.243
Low	27 (31.8%)	29 (34.1%)		
High	23 (27.1%)	6 (7.1%)		
Behavior Intention			0.010	0.304
Low	17 (20%)	22 (25.9%)		
Hhigh	33 (38.8%)	13 (15.3%)		
Social Support			0.000493	0.142
Weak	23 (27.1%)	30 (35.3%)		
Strong	27 (31.8%)	5 (5.9%)		
Accessibility of Information			0.956	1.053
Rarely	3 (3.5%)	2 (2.4%)		
Often	47 (55.3%)	33 (38.8%)		

Table 6 shows the results of cross-tabulation and simple logistic regression test results between each independent variable and the dependent variable. The result of cross tabulation between gender variables and fast food consumption behavior shows that the frequency of respondents consuming the most fast food is female respondents. While male respondents equaled between those who consume fast food and do not consume fast food that is equal to 18.8%. The results of simple logistic regression test showed that gender variables did not affect the behavior of fast food consumption because it has a significance value of 0.201 ($> \alpha = 0.05$).

The result of cross tabulation between allowance variable and fast food consumption behavior showed that the frequency of respondents who consumed fast food was the most respondent with low allowance of 31.8%. Then, the frequency of respondents who do not consume fast food is respondents with low allowance also amounted to 34.1%, so it can be said that allowance has a big role in fast food consumption patterns on respondents. The result of simple logistic regression test shows that the variable of allowance to fast food consumption behavior because it has significance value equal to 0.008 ($<\alpha = 0.05$) and has OR (odds ratio) value equal to 0.243. It means that respondent having high allowance at risk consumes fast food equal to 0.234 times compared to respondents with low allowance.

The result of cross tabulation between behavior intention variable and consumption behavior of fast food showed that the frequency of respondents who consumed fast food mostly occurred in respondents who have high intention in consuming fast food that is equal to 38.8%. Whereas, the frequency of respondents who did not consume fast food most common in respondents who have low intention in consuming fast food that is equal to 25.9%. It can be said that the consumption of fast food on the respondents follow the intention of the respondents in consuming fast food. The result of simple logistic regression test shows that the variable of intention have an effect on the behavior of fast food consumption because its significance value is 0.010 ($<\alpha = 0.05$) and has OR value 0.304 which means respondent with high intention risk 0.304 times consuming fast food compared to respondent with low intention in consuming fast food.

The result of cross tabulation between social support variable and fast food consumption behavior showed that the frequency of respondents who consumed fast food mostly occurred in respondents who got strong social support from the surrounding environment that is equal to 31.8%. While the frequency of respondents who do not consume fast food most common in respondents who get weak social support from the surrounding environment is equal to 35.3%. It can be said that the consumption of fast food in the respondent follow the support obtained by respondents from the surrounding social environment. The result of simple logistic regression test shows that social support variable influences fast food consumption behavior because it has significance value equal to 0.000493 ($<\alpha = 0.05$) and has value of OR 0.142 which means that respondents who get strong support from surrounding environment to consume fast food have risk 0.142 times bigger to consume fast food than respondent get weak support from social environment around .

The result of cross tabulation between accessibility of information variable and fast food consumption behavior shows that the frequency of respondents consuming fast food mostly happened to respondents who often access information about fast food that is equal to 55.3%. The same thing with respondents who do not consume fast food at most also occur in respondents who often consume fast food that is equal to 38.8%. This can be interpreted that the majority of respondents often access information about fast food, but the behavior of fast food consumption on the respondents do not follow the information access. The result of simple logistic regression test shows that the accessibility of information variable does not affect the consumption behavior of fast food because it has a significance value of 0.965 ($> \alpha = 0.05$).

4.0 Discussion

4.1 The Influence of Respondent's Gender on Fast Food Consumption Behavior

Based on preliminary studies conducted before the study, it was found that female respondents consumed more fast food than male respondents. This can be said that the pattern of food consumption in female adolescent is worse than the diet of adolescent boys. This is not in line with the results of research showing that both boys and girls alike love fast food consumption, so there is no difference in fast food consumption behavior between adolescent boys and juvenile meetings.

The results of this study indicate that gender does not affect the behavior of fast food consumption in students in SMA Negeri "X" Surabaya. The results of this study are not in line with research Vilanty (2014) which states that gender is one of the factors that affect the pattern of consumption in adolescents. The research is located in Surabaya city targeting high school students, so it can be said the same with this research. The intake of food consumed by adolescents contains higher energy intake than protein intake. Male teenagers are more likely to eat high carbohydrates such as rice, instant noodles and bread compared to female teenagers with frequencies 1-3 times a week. According to the researchers, male teenagers are considered more indifferent and do not think much about what foods are consumed (Vilanty, 2014).

Based on the explanation, the difference of this research result with previous research that is similarity likes fast food consumption in adolescent of man and woman in this research. The similarities in liking fast food in adolescent boys and girls can be caused by several factors. The reason often consumes fast food in men and women is the same majority because of the time of making a fast, practical, tasty and tasty, following the times, the ability to buy fast food, given the freedom by parents to consume fast food, and invitation from people nearby. Based on some of these reasons then the right way to make teenage boys and girls reduce the consumption of fast food is to provide health education through schools where students learn. Making health promotion media can also be a solution for students to know the facts about the dangers of fast food consumption with frequent frequencies such as standing banner, sticker, poster, and so on.

4.2 The Influence of Respondent's Allowance on Fast Food Consumption Behavior

The allowance represents the amount of money allocated from the parent's income to be given to the child within a certain period of time (Fitri, 2011). This research categorizes teen allowance in high and low amounts. According to Putra (2017), adolescent allowance in Surabaya can be classified into two categories namely high allowance that is above Rp 35000 and low allowance of less than Rp 35000. The category of allowance is limited to the average allowance of students in one day.

The results of this study indicate that the allowance affects the behavior of fast food consumption in students in SMA Negeri "X" Surabaya. The results of this study are in line with some previous studies. Higher allowance makes the frequency of fast food consumption also higher. This happens because teenagers get enough allowance and freedom to buy fast food (Imtihani, 2013). In addition to buying fast food, high allowance is used to meet the needs of teenagers when outside the home, so that the pattern of food consumption and

intercourse teens to change (Sinaga, 2016). The research results Mahpolah et al (2013) states that teenagers with high allowance have a tendency to love fast food consumption with frequent frequencies as well. Consumption of fast food with excessive frequency happened because of the fast food is very inviting taste, practical, fast presentation, also raise prestige in adolescents. Fast food is not food that should not be consumed, but must be considered wisely the frequency of fast food consumption that too often will have an impact on health, especially obesity (Mahpolah, 2013).

Several previous studies show results that are not in line with this study, among others, according to research Afifah (2017), states that the allowance owned by respondents not associated significantly with fast food consumption. Teenagers with high or low allowance have the same likes the consumption of fast food (Afifah, 2017). The results of other studies that are not in line is Oktaviani (2012) study which states that most respondents have homogeneous allowance or there is no significant difference in each individual. So that allowance does not affect the consumption of fast food in adolescents (Oktaviani, 2012). Based on some previous explanation, it can be said that allowance directly related to the ability to buy and order fast food. Having more allowance will increase the opportunity of teenagers, especially students in SMA Negeri "X" Surabaya to buy fast food because they feel able and free to buy fast food with their own money.

4.3 The Influence of Respondent's Behavior Intention Against Fast Food Consumption Behavior

Intention to consume fast food is a factor that initiates or underlies a person to consume fast food. This study distinguishes the intention of respondents in consuming fast food into two things: interest or desire and needs. The results of this study indicate that the intention of respondents influence the behavior of fast food consumption. The results of this study in line with research Hanum, et al (2014) which states that the interest factor or desire to consume fast food has a relationship with the incidence of abnormal nutritional status in adolescents. Interest of fast food is a tendency or a high desire that occurs in a person will be something that is very liked. It makes someone will try hard to get something that interest or desirable (Hanum, 2014).

In addition to Hanum's research, the results of Anugrah's research (2014) also mentioned that the reason teens make fast food as a food that much in demand is to increase prosperity and follow westernization. The influence of westernization caused teenagers prefer fast food to meet the needs of their association. Modern lifestyle caused nutritional status in adolescents to be above normal (overweight). This is because consuming foods with high in calories and fat in fast food too often without accompanied by high physical activity (Anugrah, 2014).

Wahyuni research (2013) states that respondents choose fast food as a daily food menu to meet the needs of eating either breakfast, day or night. This is because the respondent is a boarding child or do not live with parents, so the respondents choose fast food for the daily diet - the day schedule is very dense activity. Fast food is considered to be the most appropriate choice to adjust the density of teenage activities today (Wahyuni, 2013). Based on some previous explanations, eating can be said that the intention is a factor that directly affects teenagers to decide to eat fast food according to the wishes and needs of daily meals in adolescents.

4.4 The Influence of Respondent's Social Support Against Fast Food Consumption Behavior

Social support is one of the external factors that affect a person to consume fast food. External factors in question is to imitate others, follow the association, invitation friend and pleasure (Hanum, 2014). Social support in this research is divided into two namely support of friends and family support. Two sub variables are selected based on the social environment that most influence a person in consuming fast food. The social environment (friendship) because the respondent is a school-age teenager who must have many friends. And family plays an important role because adolescents are still under the supervision and responsibility of parents.

The results of this study indicate that social support affect the behavior of fast food consumption. The results of this study in accordance with research Sinaga (2016) which states that teens love to eat fast food because of the invitation or encouragement from friends or family. Such support is known as hanging out. Hanging out is an activity that is done outdoors to just talk, meet friends and so forth. Hangout was usually done by teenagers with their friends and family. A favorite hangout place for teenagers is fast food restaurants or cafes, because it is convenient, affordable and provides free internet access. Hanging out activities are usually done teenagers during holidays, school or weekend time with parents and friends (Sinaga, 2016).

Other studies that are in line are Asnaini's research (2016). Asnaini mentions that the important people who become the reference of students in consuming fast food such as brother, father, mother, cousin, and friend. Some informants in the study mentioned that usually invited by parents to eat at fast food restaurants because they are bored with house cooking. In addition, often mothers order fast food through food delivery services as a food menu. The habit of serving fast food at home occurs due to limited time owned by parents because of work or other activities (Asnaini, 2016). Fast food or ready-to-eat-food is the best alternative for busy parents or consuming fast food when spending time with family in modern society (Setyawati, 2016).

Based on Putri's research (2013) states that the influence of social environment on fast food consumption behavior in adolescents can be a culture. Teenagers who have a family background who love fast food will have a great tendency to like fast food and choose not to eat at home. There is a very close relationship between the lifestyle (culture) of individuals, families, and society, so that eating habits of a person is a reflection of the eating habits of the surrounding community (Putri, 2013).

4.5 The Influence of Respondent's Accessibility of Information to Fast Food Consumption Behavior

The development of Science and Technology (Science and Technology) makes things easier to obtain. One of them is fast food that is increasingly in demand by the community. People, especially teenagers who are currently the majority of "literate" information can easily buy fast food. Business owners or fast food restaurants use information access to promote their fast food products. For example, social media that is used to inform about fast food restaurants that is comfortable, even coupled with the provision of discounts. This makes teenagers more fond of the consumption of fast food than home-based food (Sinaga, 2016).

The results of this study indicate that the variable Access Information does not affect the behavior of fast food consumption. The results of this study are not in line with research conducted Hanum (2014) which states that the advertising media is one of the external factors of fast food consumption in adolescents. Media advertising both through social media and conventionally affect the consumption of fast food in adolescents. The more often adolescents exposed to fast food ads, then the purchase of fast food will also increase. In addition to increasing the frequency of fast food consumption, advertising media can help improve youth knowledge of fast food (Hanum, 2014).

Other research results that are not in line with the results of this study are research Princess (2013). Princess explains there is a relationship between media factors or advertising with adolescent eating behavior. This is because school-aged teenagers are a relatively vulnerable group to advertising or other promotional media, such as fast food advertisements or advertisements about the current lifestyle. Most of the respondents were affected by advertisement of fast food products through internet access or advertisement on television, to buy and consume the advertised fast food (Putri, 2013). Based on the things discussed earlier, it can be analyzed that what caused the different results of this study with previous research is the rapid development of technology today.

Respondents in this study are located in the centre of the city that is definitely filled with ease of access to information. The majority of respondents have frequent access to information about fast food so it can be said that not many respondents rarely access information about fast food.

5.0 Conclusion and recommendation

The conclusion of this research is among the five independent variables, there are three dependent variables that affect the behavior of fast food consumption. The three independent variables are allowance, behavior intention, and social support. In addition to the three independent variables that influence, there are two independent variables that have no effect on fast food consumption behavior. Both variables are gender and accessibility of information.

Based on the results of the research, suggestions or recommendations can be addressed to some parties, among others, parents, schools, and local health authorities. Recommendation for parents of students is to provide healthier food for their children. One alternative is to bring their own provisions that contain healthy food menu such as multiply vegetables and fruit to under when the school. And, to supervise the use of their children allowance, to be wise in the use of allowance, especially to consume healthier foods.

Recommendations for the school is first to create a program to eat healthy foods for the students. For example applying forbidden rules of snack outside school, bringing supplies every day, and providing a canteen that sells healthy food. Both conduct Health education on their students, can work together with local health centre to further improve students' knowledge of the dangers of fast food consumption and can implement healthier life behavior. Third provides health promotion media that can be viewed at any time by students in school

such as standing banner, posters, magazines, stickers, and so on. Health promotion media contains material about the negative effects of consuming excessive fast food, how to set a healthy diet, and so forth.

Recommendations for local health agencies that first provide health education to students about the pattern of healthy food consumption, especially for adolescents, giving exposure to the dangers of consuming excessive fast food for health. Both provide health education to parents of students at school on the importance of supervising the consumption patterns of their children, as well as training the making of healthy food menu to be cooked as their children's menus. Third provides the latest information through social media that can be accessed through the gadget. The information contains about the dangers of consuming excessive fast food, one of which is the danger of flavorings that make fast food more delicious than other foods is not healthy, and so forth.

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