



Do Emotions Affect Students' Eating Behavior?

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Abstract. Students' emotions may affect eating behavior when students have negative and positive emotions that can affect how much they over-eat or less-eat. This research aims to analyze how emotion affects students' eating behavior. The participants are 20 students from 8th grade from one private school in Bandung, Indonesia. The method of this research used descriptive data. This participant has completed interviews and fulfilled students' eating behavior questionnaires. The indicators are emotional over-eating and emotional under-eating. The result of the data showed that negative and positive emotions (sadness, stress, and happiness) can affect students' food intake. Students also have emotional eating that is followed by positive feelings that affect food consumption. It identified that students likely eat unhealthy foods and implement unhealthy eating habits. In conclusion, students should be educated on how to handle emotions in eating to prevent unhealthy eating and practice a healthy lifestyle such as controlling their eating by consuming healthy foods.

Keywords: Eating Behavior, Emotion, Habits

Introduction

Due to the process of growing from a kid to an adult, the secondary student is in a crucial stage of physical and mental development. It affects advances in the psychological, biological, mental, emotional, and behavioral aspects. Students have to adapt to these developments in order to fill gaps and realize their strengths and self-identity [1]. Students require nutrition, which they can get by consuming a balanced diet of high-quality foods. A student's physical health, concentration, and emotional stability can all be supported by eating nutritious food [2].

Many research investigations on students' eating habits have found low consumption of fruits and vegetables, which is linked to excessive fat consumption [3]. In order to deal with their negative emotions, students tend to eat excessively, non-eating behavior, or stop eating completely, which can have a negative impact on their physical and mental health as well as their self-esteem and academic stress [4]. Weight history before and after a person's experiences with emotional eating can show the impact on their physical health.

Students' eating habits are influenced by their emotions since unhealthy eating behaviors can cause nutritional issues that result in morbidity and diseases including diabetes and cardiovascular disease, obesity, poor performance, and eating disorders like binge eating and under-eating [5]. When it affects students, can cause additional negative things, such as physical worthlessness [6]. Adult students need to learn how to regulate their eating when they are in secondary school. Eating habits, such as choosing what, when, the quantity, where, and who to eat with, are learned behaviors that start in early childhood. Biological, social, psychological, and mental needs all influence eating behavior [7]. However, a number of factors including physiological, social and cultural, psychological, and economic, have an impact on eating. These connections transform the concept of eating behavior from a simple pattern of food intake to a complicated pattern of eating habits.

Emotional eating is characterized as a person's reaction to stress or as insufficient and ineffective stress management, expressed by overeating and linked to weight gain. Individuals overeat not because they are hungry, but as an attempt to improve mood and minimize discomfort due to stress. When someone expresses stress through eating even when they are not hungry. The purpose of the activity is not to satisfy one's hunger but rather to comfort oneself, relieve stress, improve a person's emotional state or reward oneself [8]. Emotions during mealtimes influence how much food is consumed. People may overeat or stop eating earlier in order to release tension and emotion. Age, gender, educational background, employment, financial status, stress, and emotional regulation skills are psychosocial and sociodemographic factors that have a major impact on the occurrence of this emotional eating.

The body's response to physical and psychological stressors, such as the demands of academic life, is a student's emotional state. Emotion can be produced as a physiological state in a system when a stimulus is present in an excessively intense way that is not preferred in the form of psychological, physiological, and behavioral reactions. When there is a disconnect between environmental demands and a person's capacity to fulfill them, pressure that is perceived as potentially harmful, upsetting, and uncontrollable to be experienced as emotion and stress [8]. Emotions influence eating habits in a way that is influenced by the physiological and mental circumstances surrounding eating. Stress affects eating habits by influencing overeating and undereating [9].

Many students are burdened with assignments, homework and test, which causes stress, sadness, leading to overeating and less eating. Some learners were found that doing assignments, homework, and preparing for tests while eating sweet foods such as tea drinks, milk, and biscuits, and other salty foods such as snacks, chips, canned-food, desserts or cakes, milk and cheese, and sweet beverages [10]. Eating is essential for reducing emotional tension in stressful situations, such as gaining new comfortable circumstances [11]. Food is available in store, restaurant, café, canteen, an outlet where there are a lot of salty and sweet food (individuals likes these foods in an emotional situation). The food process and production is increased in fast process such as friend chicken. Other quick beverages and foods are ice cream, crackers, milk, beverage, that persons can take it to reduce emotion.

Many research has investigated emotional eating with physical activity levels [9]; emotional eating towards European population[7]; emotional eating on higher students

[12]. However, this research focuses on how emotion affects secondary students' eating behavior. Previous research has been explanation about college students with high stress and emotion. Unfortunately, there is no explanation how emotions affect to students' eating behavior in junior high school level. This research aims to explain students' emotion in eating behavior that is related in health and unhealthy diets.

2 Methodology

The method of this research used descriptive method. The students are from one of private school in Bandung. The subjects are 20 students. The sampling was purposive sampling which students fulfil questionnaire and participate in interview. Student received a online-based survey through google form to assess students' emotional eating. Then the questionnaire was filled for 30 minutes. Emotional Eating behavior measurement using Adult Eating Behavior Questionnaire (AEBQ) and the interview is from emotional eating perceptions. Table 1. Shows dimensions and instruments of emotional eating in questionnaire and interview.

Table 1. Emotional Eating Instruments

Questionnaire	
Dimension	Item
Emotional overeating	"I eat more when I stress"
Emotional undereating	"I eat less when I stress"
Interview	
Dimension	Item
Emotion affects to food choices	"What's your food choice when you are getting emotions"
Emotional pattern	"What caused you to get emotional?"
Emotionally instrumental eating	"Do these emotions affect your eating behavior?"

The indicators of questionnaire are from emotional over-eating and emotional undereating [13]. Emotional Over- Eating has 4 items and Emotional Under-Eating has 4 items. The interview was conducted by the author on one female group in a class and one male group in a other class. Each interview group took 20 minutes, was phone-recorded and written on note. The interview indicators are emotions affects to food choices has 2 questions, emotional pattern has 2 items, and emotionally instrumental eating 2 items The students also participated in interview with 6 questions that adapted from emotional eating perception [14]. Then the questionnaires that have been distributed are recapitulated and checked for completeness to be processed and analyzed. All items show good, standardized reliability and validity. The data analysis used quantitative statistics by using SPSS 23 version. The interview transcript was read to check the completeness and describe it into text.

3 Result and Discussion

Figure 1. shows that students' emotional in eating in emotional under-eating and emotional overeating. 20 students have emotional over-eating rather than emotional-under eating. learners' emotions can lead to over-eating.

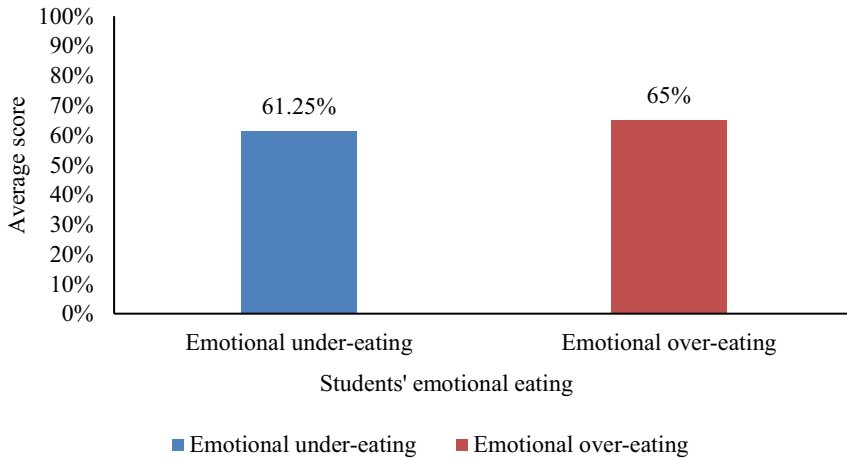


Fig. 1. Students' emotional eating

According to the findings, students over-eat emotionally more often than they under eat emotionally. Negative emotions can influence eating behavior, a process known as emotional eating. In other words, emotional eating is the act of using food as a coping mechanism for good feelings [15]. Emotional eating or overeating can result from both positive (happy) and negative (worry and boredom) emotions. Emotional discomfort results from people experiencing things that generate emotional reactions but that they are unable to express directly[16]. As a result, there is a diversion effort to avoid this discomfort by looking for momentary pleasure so that these feelings are reduced. Consuming foods with sweet and salty flavors, individuals feel calm and form the perception that eating is one of the solutions.

When young people are dealing with numerous issues, overeating develops into a habit. Eating is a meaning for people to take their attention away from the unpleasant feelings that can make them feel like they are in trouble. Both negative and positive emotions have the power to improve people's moods. Students would eat more than they needed to because they were emotionally fulfilled by food rather than physically hungry [17].

Additionally, the desire for hunger often results in impulsive food buying. The reason for this food purchase is that students consume a lot of food with the support of technology and the Internet [18]. The development of technology makes individuals accustomed to making more impulse purchases [19]. Technology advancements, digital or e-commerce have also started to develop quickly. One such industry is food delivery

which enables people to order food using smartphone from anywhere, any time, eliminating the need to physically visit a store or a mall. Impulsive buying works to reduce purchases of fast food, comfort food, and canned-food [20]. Unfortunately, many students turn to comfort foods like ice cream, cakes, chocolate, biscuits, sweet drinks, french fries, or pizza. It increases in the consumption of sugar, salt, and fat.

Emotional negative effects include making it difficult to inspire feelings of anxiety, sadness, and anger. Negative cognitive effects of emotions include difficulties concentrating during studying and difficulty understanding lessons that are influenced by emotions [21]. The pressure adolescents face in their academic lives is one of the causes of this. Due to the students' consumption of unhealthy, high-calorie foods, emotional eating might be harmful to their health. that emotional eating contributes to weight gain, obesity, high blood pressure, diabetes, and other health issues [22].

Some learners do not want to eat when they are sad, angry, anxious, and bored because they are thinking too much about their thoughts so there is no desire to eat and seek a comfort zone or distraction. Learners are busy doing learning activities, doing assignments, and participating in extracurricular activities, so learners do not have time when eat. This leads to eating less at each meal. Stress and anxiety are strong factors that can affect eating. Some individuals experience decreased eating when under stress. Social and cultural pressure factors, where learners have certain food habits that cause them to eat less. In addition, stressed learners want to diet or lose weight so deliberately eat less.

3.1 Interview result

They do not attempt to control their emotions and have a tendency to have unstable emotions. The issues adolescents face will be related to one another (Virtanen et al., 2015). Additionally, affective and cognitive participation are correlated with school tiredness and favorably with academic accomplishment and self-esteem [23]. There is a lot of factors that influence students' emotions. Students suffer stress, become unstable, and have difficulty understanding because of the present confusion and changes. Junior high school pupils' academic progress is impacted by their social adjustment. In addition to issues with anxiety and worries about the educational process and learning outcomes. There are some students said that;

"I'm stressed because of an assignment that I want to eat and feel hungry. I buy milk, water, coffee, and ice water. the food is noodles and snacks." (F1)

"I'm bored because of the breakfast food, so I want to eat junk food" (F4)

"I love eat street food because I'm bored with vegetables." (F7)

"When bored, drink coffee." (F8)

"I get angry because when the friend made a mistake, I advised him. But he didn't care. Another reason is losing when I play game. Thus, I want to eat spicy food" (M1)

"When I watch a movie, I'm happy because the movie is exciting. If the movie is happy, I like to eat sweet and salty. (M2)

"When the movie is sad, I eat sweets." (M2)

"learners eat steak, sushi, cheese, pasta and macarons" (M2)

“Learners' favorite drinks are milkshake, juice, lemon tea, and matcha.” (F1, F2, and F3).

The cases student are from physical healthy, psychological situation, social relationship, lessons, values, moral, social interactions, relationship with family, relationship with other students, academic assignments, friendship problems, grades, and examination [23]. People who overeat when in a bad mood like to eat tasty and high-density foods, which can result in weight gain [24]. Five classes of emotion-induced changes of eating: (1) emotional control of food choice, (2) emotional suppression of food intake, (3) impairment of cognitive eating controls, (4) eating to regulate emotions, and (5) emotion modulation of eating.

Despite this description, emotional eating is currently defined as a tendency to eat more when experiencing unpleasant feelings like worry, sadness, anger, or loneliness. Emotional eating theory states that negative emotions can induce eating, because eating has the capacity to reduce their intensity. Negative emotional eating was connected to a negative emotional state such as anxiety and depression have been found to have an impact on the quantity of food consumed during binge eating experiences [25] [26]. Therefore, negative emotional eating may act as a regulation strategy, preventing people from using more adaptive regulation techniques.

3.2 The students feel so happy so, they want to eat.

“I'm happy if the foods are made from my parents' cooking because it's free, I'm used to it from a young age, my parents know what I need, they serve healthy food and they make food with love”. (F1)

“When learners are happy, they eat bread, meatballs, steak, junk food, cheese, and sweet beverages such as milk tea, matcha. (F4)”

“I like eating with friends, because we chat, eat together, share food such as giving vegetables and fruits to friends, not being lonely, forgetting the problems that exist in students, increasing appetite”. (F2)

“I'm happy because of get good score, want to eat sweet food, like chocolate.” (M7)

This finding implies that joyful feelings can also be a predictor of binge eating. Correlations with binge eating and disinhibition were discovered for the positive emotional eating subscale. According to previous studies, positive emotional eating is also linked to overeating and binge eating [27]. Eating more food, especially highly sweet foods, is associated with positive emotions. In this respect, positive emotional eating emphasizes the fact that food may be used to increase a positive emotional state as well as reduce unpleasant emotions [24].

3.3 The students eat less because of emotions.

“When sad, eat little due to selfishness, eat lazily, and rather to sleep.” (F8).

“I dislike to eat pumpkin, bitter melon, paprika, sprouts, and dogfruit, and celery” (F10)

"I was sad because I was bullied by my friends, so I think about why he's angry with me? I didn't want to eat because I remembered the problem." (M6)

"I'm sad because when I chat to ask for help, I don't get a reply, so when I eat, I'm not calm, overthinking, and not enjoy eating." (M6)

"When I overthink, I can't sleep. I don't eat much, and I lose weight. When grades are small" (M9)

"When I'm sad, I don't want to eat. An example of sadness is not getting concert tickets. In order not to be sad, I eat less." (M8)

As a result, it's possible that the individual is undereating in reaction to some stressors (like stress, sadness, fear, anger/frustration, and discomfort) [28]. Stress may play a significant impact in emotional undereating because it is thought to be particularly important for emotion control [29]. Children who have trouble controlling such as control their emotions to reduce the chance of emotional undereating. One of the common elements that contribute to the beneficial connection between less eating and children is likely their capacity to control their emotions. The type of stressor influences whether the students end up undereating. It's possible that students who are less able to control their own emotions. The effects of emotional undereating opposite connects to weight increase [30].

4 Conclusion

Based on the data above, it shows that students' experience negative emotions due to academic life such as a lot of assignments, and school exams. Internal problems, namely conflicts with parents, with siblings, and so on. In positive emotions, they are happy because they have done the exam, got good grades, and others. The impact of negative and positive emotions can trigger learners to consume sweets, snacks, and local food as a form of response to reduce emotions and release happiness energy by eating. Learners are made easy to get food and drinks through online ordering by opening applications available on smartphones. Some learners experience emotions due to assignments, exams, and conflicts with friends that trigger learners' sadness and anger so they choose not to eat or chew less food. The next step is for learners to adopt a healthy lifestyle such as eating foods that contain complete nutrients foods to improve their body health.

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