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STRESS LEVEL AND EMOTIONAL EATING RELATIONSHIP WITH RISK OF OBESITY ON FEMALE STUDENTS IN ISLAMIC BOARDING SCHOOL IN THE CITY OF BEKASI.

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Abstract

Introduction: the occurrence of stress in female students can come from oneself, the environment, and the mind. Female students who experience stress are prone to experiencing emotional eating or eating emotionally because of the stuffing emotion factor or choosing food as an alternative to relieve sadness, stress, loneliness, and other negative emotions. Female students who experience stress and emotional eating tend to choose sweet and high-fat foods in excess, thereby increasing the risk of obesity.

Method: this research is a quantitative study with a cross sectional design. This sample was taken by consecutive sampling technique with a total of 90 respondents. The population studied were female students who were active in Islamic boarding schools Annida Al-Islamy Bekasi is 14-18 years old.

Results: based on the results of the chi-square statistical test, obtained p-value = 0.027 (p-value<0.05) with an OR value (95%CI) = 3.439 for the relationship between stress levels and the risk of obesity, then obtained p-value = 0.021 (p-value<0.05) with OR (95%CI) = 3.938 for the relationship between emotional eating and the risk of obesity in female students.

Conclusion: there is a significant relationship between the level of stress and emotional eating with the risk of obesity in female students at the Annida Al-Islamy Islamic Boarding School, Bekasi City.

Key words : stress levels, Emotional eating, Risk of obesity.

INTRODUCTION

Women are 2.2 times more likely to experience stress than men (Kountul, et al, 2018). The density of activities carried out in Islamic boarding schools (Fadliansyah, 2013), can be associated with stressful events on female students (Fhonna, et al, 2020). Stress is the body's response to mental pressure or burden perceived life (Sari, and Defrin, 2015). The influencing factors are self, thoughts, and the environment (Musradinur, 2016).

Women are more at risk of experiencing emotional eating when they are bored, stressed and others (Putri, 2015). Emotional eating is an action taken by increasing food intake to coping with difficult feelings (Bennett et al., 2013), even when not hungry (Gavin 2014; in (Kustantri, 2020). This can happen because of the trigger factor, namely stuffing emotion and gender (Gavin 2014; inside (Kustantri, 2020).

Nutritional problems that can occur if a person experiences stress and emotional eating the risk of obesity. This statement is supported by the results of research conducted by Bennett, et al, (2013) found that about a third of the students studied experienced emotional eating to cope with stress and an average weight gain of 5 kg.

Obesity is a condition characterized by excessive fat accumulation in the in the body, so that it affects excess body weight and the health of the individual (Dewi,2015). Obesity is a state of overnutrition caused by various factors including stress and obesity emotional eating. In adolescence, obesity is a serious problem because it will continue into adulthood and can cause other health problems such as diabetes mellitus, hypertension, and other non-communicable

diseases (Telisa, Hartati and Haripamilu, 2020).

Based on the results of the Riskesdas survey, (2018), the prevalence of obesity in adolescents aged 16- 18 year by 13.5%. Then, the incidence of obesity in adolescents aged 16-18 years in the area of West Java Province by 4.51%. Bekasi City is included in the West Java Province which has a prevalence of obesity incidence for the group of adolescents aged 16-18 years of 4.11% (Riskesdas, 2018).

There are previous studies that link similar variables, such as research conducted by Demonti, (2020) found a significant relationship between the level of stress with the incidence of obesity, marked by the results of the study, which is about 50% of students with Level II obesity experiences severe stress.

Kustantri, (2020) also found an emotional connection eating with obesity (p value $0.007 < 0.05$). Based on Syarofi's research, (2019) which proves that there is a relationship between stress levels ($p=0.011$) and emotional eating ($p=0.000$) with the level of adequacy for regular nutrition students at Universitas Airlangga who are preparing a thesis.

Based on the above background, researchers are interested in conducting research with the title "The Relationship between Stress Levels and Emotional Eating with the Risk of Obesity in Female Students at Islamic Boarding Schools Bekasi city".

METHOD

The design of this research is correlational which aims to determine the relationship between two variables independent (independent) as a predictor with one dependent variable (dependent) as a criterion with approach using cross sectional. The location of this research is the Annida Al-Islamy Islamic Boarding School, Jalan IR. H. Juanda, Margahayu, East Bekasi, RT.001/RW.007, Bekasi Jaya, Kec. East Bekasi, Bekasi City, Java West 17113 and previously had never conducted a study with a similar title. Taking sample by consecutive sampling with a total sample of 90 active female students at the Annida Al . Islamic Boarding School Islamic Bekasi. There are inclusion criteria, namely, respondents aged 14-18 years, female students with active status in Annida Al-Islamy Islamic Boarding School, respondents are willing to participate in all research activities, physically and mentally healthy. There are exclusion criteria, namely female students who do not fill out the questionnaire completely.

The instrument used in this study was a questionnaire filled out by respondents online using google forms. Questionnaire for stress levels using the Perceived Stress Scale consisting of 10 questions with 5 answer criteria and interpreted according to the stress level score, that is, it says mild stress if the total score is 0-18 and severe stress if the total score is 19-40. Then, for emotional eating using the Dutch Eating Behavior Questionnaire (DEBQ) which consists of 13 questions with 5 answer criteria and interpreted according to the emotional eating score , that is, it says high if the total score is > 2.35 and it is said to be low if the total score is < 2.35 . Meanwhile, for the dependent variable (obesity risk) by direct measurement using a digital scale with an accuracy of 0.001 kg and microtoise related to the height and weight of female students at the Annida Al-Islamy Islamic Boarding School. Then interpreted using a score (BMI/U) which is said to be at risk of obesity if the score $1+ SD$ and said tbe not at risk if the score $< 1+ SD$.

The questionnaire used in this study has been tested for validity and reliability in Islamic boarding schools different, but have the same characteristics as those at the Annida Al-Islamy Islamic Boarding School in Bekasi namely the Modern Yapidh Islamic Boarding School in Bekasi. Both questionnaires have been declared valid based on at the r count value

(corrected item total correlation) $> r$ table of 0.361 with a significance level of $(\dot{y}) = 0.05$ and is said to be reliable based on the reliability coefficient or alpha $(\dot{y}) > 0.6$.

RESULTS

The Annida Al-Islamy Islamic Boarding School Bekasi is the place where this research was carried out, which is located in IR road. H. Juanda, RT.001/RW.007, Margahayu, East Bekasi, Bekasi City, West Java. Boarding school Annida Al-Islamy is a modern Islamic boarding school that was founded in 1963. There are various facilities and services available infrastructure for educational activities at the MTs, MA, and Tarbiyah Al High School of Sciences Marhalah Al Ulya with a total number of students as many as 660 students and the number of educational staff as many as 50 people. The boarding school is led by the head of the madrasa and there are teachers who competent in teaching various subjects according to the curriculum and religious knowledge.

Univariate Analysis

The univariate analysis was carried out with the aim of looking at the frequency distribution of the variable the characteristics of the respondents include age and grade level, then frequency stress levels, emotional eating, and the risk of obesity. Respondents in this study were students active daughter at the Annida Al-Islamy Islamic Boarding School in Bekasi.

Characteristics of Respondents

Grouped by age and grade level can be seen in table 3.

Table 1. Frequency Distribution of Respondents' Characteristics of Female Students at Pesantren Annida Al-Islamy Bekasi in 2022

Characteristics of respondents	N	%
Age		
15 years	20	22,2
16 years	29	32,2
17 years	25	27,8
18 years	16	17,8
Class Level		
10	29	32,2
11	31	34,4
12	30	33,3

Source: Primary Data (2022); N=90

Based on table 1 it can be seen that, most of the respondents are 16 years old, that is as many as 29 respondents (32.2%) of a total of 90 female students and most of the respondents are at the 11th grade level, as many as 31 respondents (34.4%) out of a total of 90 female students.

Stress Level

The frequency distribution of respondents' stress levels can be seen in Table 2.

Tabel 2. Frequency Distribution of Stress Levels for Female Santri in Islamic Boarding Schools Annida Al-Islamy Bekasi in 2022

Stress Level	N	%
Heavy stress	72	80
Mild stress	18	20

Source: Primary Data (2022); N=90

Based on table 2, it can be seen that, most of the respondents with high stress weight, as many as 72 respondents (80%) of a total of 90 female students.

Emotional Eating

Emotional eating frequency distribution of respondents can be seen in Table 3.

Table 3. Distribution of Emotional Eating Frequency among female students in Islamic boarding schools Annida Al-Islamy Bekasi in 2022

Emotional Eating	N	%
High	74	82,2
Low	16	17,8

Source: Primary Data (2022); N=90

Based on table 3, it can be seen that some respondents have emotional eating which is high, as many as 74 respondents (82.2%) of a total of 90 female students.

Obesity Risk

The frequency distribution of respondents' obesity risk can be seen in Table 4.

Table 4. Frequency Distribution of Obesity Risk in Female Santri at Pesantren Annida Al-Islamy Bekasi in 2022.

Obesity Risk	N	%
At Risk	46	51,1
No Risk	44	48,9

Source: Primary Data (2022); N=90

Based on table 4, it can be seen that some respondents are at risk of obesity, namely as many as 46 respondents (51.1%) from a total of 90 female students.

Bivariate Analysis

The results of the relationship between stress levels and the risk of obesity can be seen in table 5.

Table 5. Analysis of the Relationship between Stress Levels and Obesity Risk in Female Santri at the Annida Al-Islamy Islamic Boarding School Bekasi.

Stress Level	Risk of Obesity				OR (95% CI)	p-value
	At risk		No risk			
	N	%	n	%		
Heavy Stress	41	45,6	31	34,4	3,439	0,027
Mild Stress	5	5,6	13	14,4	(1,109-10,666)	

Source: Primary Data (2022); N=90

Based on table 5 it is known that, the results of the analysis of the relationship between stress levels and The risk of obesity can be said as many as 41 respondents (45.6%) with severe stress levels have a risk of obesity. While respondents with mild stress levels were 5 respondents (5.6%) are at risk for obesity. Based on the results of the Chi square statistical test , p-value = 0.027 (p <0.05). That matter shows that H₀ is rejected, so there is a significant relationship between stress levels with the risk of obesity in female students at the Annida Al-Islamy Islamic Boarding School Bekasi. From the results of the analysis also obtained the value of OR = 3.439. So that it can be said that respondents with severe stress levels 3,439 times the risk of obesity compared to mild stress levels. The results of the relationship between emotional eating and the risk of obesity can be seen in table 6.

Table 6. Analysis of the Relationship between Emotional Eating and the Risk of Obesity in female students at the Annida Al-Islamy Islamic Boarding School Bekasi.

Emotional Eating	Risk of Obesity				OR (95% CI)	p-value
	At risk		No risk			
	N	%	n	%		
High	42	46,7	32	35,6	3,038	

Low	4	4,4	12	13,3	(1,161-13,357)	0,021
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Source: Primary Data (2022); N=90

Based on table 6, it is known that, the results of the analysis of the relationship between emotional eating with the risk of obesity, it can be said as many as 42 respondents (46.7%) with emotional eating have a high risk of obesity. Meanwhile, respondents with low emotional eating were 4 respondents (4.4%) have a risk of obesity. Based on the results of the Chi square statistical test , p-value = 0.021 (p<0.05). That matter shows H₀ is rejected, so there is a significant relationship between emotional eating and the risk of obesity in female students at the Annida Al-Islamy Islamic Boarding School Bekasi. From the results of the analysis too obtained the value of OR = 3.938. So it can be said that respondents with high emotional eating 3,938 times more likely to have obesity risk compared to low emotional eating.

DISCUSSION

Characteristics of Respondents

Respondents in this study were female students at the Annida Al-Islamy Islamic Boarding School Bekasi, as many as 90 active female students who are willing to be research respondents. Characteristic data Respondents taken in this study were age and grade level.

For characteristics based on age, the results obtained are the most female students who become respondents in this study were 16 years old. Then, for characteristics based on the class level, the results showed that the most female students were in class 11 who became respondents in this research.

The results of this study are in line with the results of research from Rahmawati, (2016) which states: found that, demographic characteristics by age who experienced severe stress Most were aged 16-18 (60.3%) out of a total of 237 respondents at SMA Negeri 23 West Jakarta.

The age of 16 is the age of transition from adolescence to adulthood. In phase there are many new challenges to be experienced. So if female students don't face these challenges well, you will easily experience stress. In this phase, female students will experience increased feelings of loneliness, anxiety and depression. This increases the risk of female students experiencing emotional eating as an alternative to calm down. This opinion is in accordance with Romadhoni, (2019) which states that ages 14-19 years, including the age of transition from adolescence to adulthood. Then reinforced with opinion of Kaligis, (2021), which states that in the transition phase, the individual will have new experiences and challenges and experience increased feelings of loneliness, stress, anxiety, and depression in dealing with the problems that occur.

Stress level

In this study, the stress level was measured on 90 active female students in Islamic boarding schools Annida Al-Islamy Bekasi uses a Perceived Scale Stress (PSS) questionnaire with a total of 10 The questions consist of 6 negative questions and 4 positive questions that have been validated and reliability. The results obtained are most of the female students at the Annida Al-Islamy Islamic Boarding School with severe stress level.

The results of this study are in line with the results of Saputri's research, (2017) which found that From a total sample of 245 students at the Darul Ihsan Islamic Boarding School, Aceh City, there were 122 students experiencing severe stress. Another researcher, Dyah, (2020) also

found that out of a total of 100 students, girls at the Raudlotul Huda Islamic Boarding School, Temanggung Regency, there are 5 female students experiencing stress heavy.

Stress is a condition that results from several factors or what is called a stressor. so that individuals who experience stress will feel depressed. This is in accordance with the opinion from Barseli, Ifdil and Nikmarijal, (2017) which states that stress is defined as a depressed condition experienced by a person because of a mismatch between demands and abilities possessed Thus, resulting in mental stress or the burden of life perceived in the individual (Sari, Nurdin and Defrin, 2015).

Stressors can come from the environment, oneself, or from the mind of the individual. These three factors play an important role as a trigger for stress. Stress caused by environment could be due to demands from parents, teachers and themselves who requires to be positive in the environment and obedient in meeting all demands. Thus, the burden on the individual's mind increases and triggers stress. This is in line with the opinion of Musradinur, (2016) which states that there are environmental demands, self, and thoughts can trigger stress. Other researchers namely Lazarus and Folkman (2018); in Budianto, et al (2021) also stated that stress Internal factors result from physical, environmental, and social demands.

The level of severe stress that occurs in female students at Annida Al-Islamy can be caused by learning activities that are too dense, regulations that are too strict in pesantren, academic and non-academic activities, coupled with religious activities, as well as the obligation of female students to make a memorizing deposit of the Al-Quran letter to the teacher. Then, the female students also feel sad because they are far from their parents and family as well sometimes there are differences between friends because of differences of opinion. those factors that This makes female students complain a lot and are prone to experiencing severe stress.

This opinion is in line with the opinion of Fauziah, (2021) which states that and learning applied in Islamic boarding schools such as being required to memorize the Koran and hadith as well as other regulations that must be obeyed and implemented, so that students are vulnerable to stress. Reinforced by the opinion of (Laily, 2019) who found that the factors causing stress on female students at Al-Falah Islamic Boarding School, Kediri City, which comes from internal and external such as lack of parental love and differences between students.

Emotional eating

In this study, measurements of emotional eating were carried out on 90 active female students in Pesantren Annida Al-Islamy Bekasi using the Dutch Eating Behavior Questionnaire (DEBQ) with a total of 13 questions that have been validated and reliable. Obtained the results of most female students at the Annida Al-Islamy Islamic Boarding School with high emotional eating. The results in this study are in line with the results of research from Ramadhani and Mahmudiono, (2021) who found that from a total sample of 133 students aged 15-17 years in SMA6 Surabaya, there are 68 students (51.1%) experiencing emotional eating. Then, some students think that eating can improve mood and minimize discomfort. Emotional eating or interpreted as eating emotionally is an individual act in consuming food as an alternative to calm oneself from negative emotions such as stress, anxiety, and depression, even when not hungry.

High emotional eating in female students at the Annida Al-Islamy Islamic Boarding School can this is because they are susceptible to negative emotions such as stress, anxiety, and depression. These negative emotions can be triggered from various factors, such as the demands of parents who requires female students to get satisfactory grades, the demands of teachers who

requires female students to memorize the Al-Quran and Hadith, then there is a test that will take place had to be faced by female students resulted in increased feelings of anxiety, stress, and depression. Thus, they choose to eat mainly sweet and fried foods as a temporary way to calm down even if you're not hungry.

In line with the opinion stated by Bennett, et al, (2013) that Emotional eating is a negative action due to an increase in food intake to overcome feelings the hard one. Reinforced by the opinion of (Al-Musharaf, 2020) which states that emotional eating is an individual's tendency to overeat as a coping mechanisms in regulating stress, anxiety, and depression.

Risk of Obesity

In this study, the risk of obesity was measured in 90 active female students in Islamic boarding schools Annida Al-Islamy Bekasi uses anthropometric measurements consisting of body weight and height, then interpreted using the category z-score calculation (BMI/U) for determine whether the respondent is at risk of obesity or not. Thus, we get a partial result Most female students at the Annida Al-Islamy Islamic Boarding School are at risk of obesity.

The results of this study are in line with the results of research from Puspitasari, (2018) which found that women are 1.7 times more likely to be obese ($p=0.001$) than men. Results from Nugroho and Sudirman, (2020) also found the risk of obesity in 416 adolescents and young adults aged 13-24 years in Samarinda City.

The risk of obesity that occurs in female students at the Annida Al-Islamy Islamic Boarding School can be caused by several factors, such as stress that causes excessive hunger and there are factors that cause obesity. Supporting factors are physical activity factors and age factors. The female students admitted that they liked it consuming sweet foods, snacks, fried foods, and fast food. Thing This can be a trigger for the risk of obesity because the students liketo consume sweet foods and high in fat in the long term to relieve yourself from stress.

According to the Indonesian Ministry of Health, (2019) there are risky foods such as food and drinks sweet, salty foods, instant foods, fried and fatty foods. According to Ramadhani, (2021) if consuming these risky foods can increase the risk of obesity. Sigh, et al, (2020) also added that by consuming fast food, or fast food and snacks such as chips can increase the risk of obesity.

Then from the physical activity factor, female students admitted that they rarely do sports, they only doing sedentary physical activity in accordance with daily conditions such as cleaning room, study, and recite. This opinion is supported by Shadrina, (2017) who found that light physical activity dominates around 105 students (43.9%) of the 239 students at Pesantren X Bogor city. Ainun et al, (2021) also added that the findings showed that the activity of sedentary is the most practiced by young women at the Darul Aman Gombara Islamic Boarding School, Makassar namely reciting, studying, and dhikr.

Then from the age factor, female students aged 14-18 years are included in the mass group vulnerable adolescents are at risk of obesity. Because according to Juniartha and Darmayanti, (2020) during adolescence, there is an increased need for nutritional intake for development her body. However, if the intake of nutrients is excessive and uncontrolled, it can increase obesity risk. Sugiarmi and Handayani, (2018) added that during adolescence the number of fat in women increases twice as much as to prepare for pregnancy, so women are more likely to be obese. In adolescence, obesity is a problem serious because it will continue into adulthood (Telisa, Hartati and Haripamilu, 2020).

The Relationship Between Stress Levels and The Risk of Obesity in Female Students in

Islamic Boarding Schools Annida Al-Islamy Bekasi

Based on the results of the analysis of the relationship between stress levels and the risk of obesity in female students at Pesantren Annida Al-Islamy Bekasi which can be seen in table 5 is known that, p-value of 0.027 ($p < 0.05$), so it can be said that there is a relationship between stress levels and risk obesity in female students at the Annida Al-Islamy Islamic Boarding School Bekasi. From the results of the analysis, it can be seen that the value of OR = 3.439 which means that female students with severe stress levels 3,439 times the chance to have obesity risk compared to female students with heavy stress.

The results of this study are in line with the results of research from Masdar et al., (2016) who found a significant relationship between stress and obesity ($p = 0.028$) (OR = 0.443) in 132 students from SMA Negeri in Pekanbaru City. Then, reinforced by the results of research from Mohammad and Dasuki, (2021) who found that there was a relationship between stress levels and obesity ($p=0016$) in 60 young women aged 15-18 years in Sukoharjo City.

The results of this study and the results of previous studies prove that there is relationship between stress levels with the risk of obesity in the group of adolescent girls. This statement is corroborated by Nurrahmawati and Fatmaningrum, (2018) which states that, the higher the level of the stress experienced, the higher the risk of obesity in the individual.

There is a difference between the environment in the pesantren and the environment outside the pesantren. This is the reason why young women are vulnerable to stress. Before entering the boarding school, young women have unlimited activities, activities that are not too crowded and feel the facilities adequate house. Meanwhile, after they enter the pesantren environment, young women are required to be able to become independent students, able to participate in all activities and activities dense, and must be able to accept all the facilities provided by the pesantren.

The statement above is in accordance with the opinion of Suharsono and Anwar, (2020) which states that, every female student has differences in dealing with environmental conditions such as a new place to live, new friends and a new culture. According to Rahmawati and Hadiansyah, (2021) states that, if the individual is not able to adjust well the individual is susceptible to stress.

The stress experienced by female students can also come from mental pressure such as there is pressure from parents of female students who demand their children to get grades good academic, there is pressure in facing academic exams and religious exams such as depositing the memorization of the Qur'an and hadith, then there is a difference between friends because competition, and sometimes feelings of sadness arise because they are far from both parents and family.

This statement is in accordance with the opinion of Musradinur, (2016) which states, that the demands of the environment, self, and thoughts can trigger stress. Basar, Indriasari and Battung, (2020) also added that stressors can come from internal such as health and mental conditions, emotional control, etc. as well as external such as environmental conditions, family problems, academic environment, friends, the learning process, etc (Basar, Indriasari and Battung, 2020).

Female students who experience stress will easily feel hungry. Because in times of stress, the body will release the hormone cortisol which has an impact on increasing hunger. Hormone Cortisol is a hormone that functions in metabolism to digest sugar and fat be a source of energy. According to Gavin (2014) in Kustantri (2020) states that when the body is in a state of stress, the body needs a lot of energy.

The role of the hormone cortisol in these situations is to trigger the desire to consume foods that contain sugar and fat to be used as a source of energy resulting in excessive hunger resulting in excessive eating patterns, especially high desire to consume sweet foods and high-fat foods. According to Gavin (2014) in Kustantri (2020), with the increase in the hormone cortisol, this results in high activity of lipoprotein lipase in adipose tissue. So that it can increase fat stores in the body.

Based on this theory, female students with severe stress will experience an increase in energy caused by the hormone cortisol so female students tend to choose food sweet and high in fat. Then, if the food is not controlled both in terms of quantity and quality, then the role of lipoprotein lipase hormone is more active to store fat in the body, so female students are at high risk of obesity.

This statement is also proven by the results of research by Ramadhani and Mahmudiono (2021) which states that there is a relationship between stress and increased food consumption fast food, dairy products and sweet foods in adolescents. This statement is reinforced by Lubis, (2021), which states that if a person cannot control food either from in terms of the amount and type of food such as fatty and sweet foods, then a person it will be easy to become obese.

The relationship between emotional eating and the risk of obesity in female students in Islamic boarding schools Annida Al-Islamy Bekasi

Based on the results of the analysis of the relationship between emotional eating and the risk of obesity in female students at the Annida Al-Islamy Islamic Boarding School in Bekasi, which can be seen in table 6, it is known that, the p-value of 0.021 ($p < 0.05$), so it can be said that there is a relationship between emotional eating and the risk of obesity in female students at the Annida Al-Islamy Islamic Boarding School Bekasi. From the results of the analysis too it can be seen that the OR value is OR = which means that female students with emotional eating high has a 3,938 times chance of having a risk of obesity compared to female students with low emotional eating.

The results of this study are in line with the results of research by Kustantri, et al, (2020) who found there is a relationship between emotional eating and the incidence of obesity in regional health center officers District Manyar Gresik Regency that is equal to 48.2%. Supported by research results from Shriver et al, (2021) who found a positive relationship between emotional eating and incidence of obesity in adolescents.

The incident of emotional eating in female students at the Annida Al-Islamy Islamic boarding school in Bekasi was triggered by the perceived negative emotions and the stuffing emotion factor. Stuffing emotions is the action of female students who tend to choose food as a temporary alternative to relieve yourself of negative emotions. This is evidenced from the results of the answers to the questionnaire that some female students answered that when they were upset, anxious, bored, depressed, anxious, lonely and disappointed, they tend to prefer eating as a way to calm yourself, especially sweet foods even though you are not hungry.

In accordance with the opinion of Gavin (2014) in Kustantri (2020) which states that stuffing emotion is someone who thinks that with food is the way temporarily to relieve stress, discomfort, anger, fear, sadness, anxiety, hatred, lonely and shy. Someone who has such an assumption will focus on consuming food even if you are not hungry, so it is very risky for obesity. This statement is supported by Wijayanti et al, (2019) who stated that emotional eating is an example of unhealthy eating behavior that can affect weight gain body.

There is another factor in emotional eating, namely gender. Women are more at risk experience emotional eating when bored, stressed and others (Putri, 2015). So that it can be said that women have a stronger urge to eat when they experience negative emotions such as stress, depression, boredom and others than men. This opinion is supported by the opinion of Hamilton and Fagot in Gryzela and Ariana, (2021) which states that women are more dominant in using emotion focused coping than women with men who tend to use problem focused coping.

According to Morin, (2021) *problem focused coping* is when a person directly face the source of the problem and solve it and eliminate everything that makes stress, while *emotion focused coping* is when a person only focuses on maintaining feelings and emotions without any desire to change the situation that is causing the problem and stress. Thus, women tend to choose food as an alternative to maintain emotional feeling.

These two factors are the basis for female students at the Annida Al-Islamy Islamic Boarding school Bekasi has *emotional eating*, which puts female students at risk of obesity. If there is no will to change the situation, then the risk of obesity will be higher. This thing is supported by Frayn et al, (2018) which states that poor coping skills effective for dealing with negative emotions such as eating more emotionally consistently associated with obesity.

CONCLUSION

There are several conclusions in this study entitled " Stress Levels And Emotional Eating Relationship With Risk Of Obesity On Female Students In Islamic Boarding School In The City Of Bekasi" as following:

1. Characteristics of respondents in this study were obtained from a total of 90 female students active female students at the Annida Al-Islamy Islamic Boarding School Bekasi are dominated by female students who is 16 years old and is in 11th grade on average.
2. Respondents in this study experienced a level of severe stress as many as 72 respondents of the total active respondents as many as 90 female students caused by the environment, self themselves, and thoughts.
3. Respondents in this study on average experienced high *emotional eating* as much as 74 respondents from the total active respondents as many as 90 female students caused by santri daughters are susceptible to negative emotions and the presence of a stuffing emotion factor.
4. Respondents in this study had an average risk of obesity as many as 46 respondents Of the total active respondents, 90 female students were caused by female students experience stress that leads to overeating (*emotional eating*) and Supporting factors are physical activity factors and age factors.
5. There is a significant relationship between stress levels and the risk of obesity in female students at Pesantren Annida Al-Islamy Bekasi with *p-value* = 0.027 ($p < 0.05$) and OR = 3.439.
6. There is a significant relationship between *emotional eating* and the risk of obesity in students girls at the Annida Al-Islamy Islamic Boarding School Bekasi with *p-value* = 0.021 ($p < 0.05$) and OR = 3,938.

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