## Chapter Four

## Findings and Discussion

In this chapter, the reseacher discusses the findings of the researchThe first finding answers the first research question which is about the students' classroom seating position. The second finding answers the second research question which is about the students' achievement. Furthermore, the third finding answers the third research question which is about the correlation between classroom seating position and students' achievement. In addition, the researcher also provides the discussion of each finding.

## Findings

In this part, the researcher presents the result of the research. The first finding is about the students' classroom seating position. The second finding is the results for the second research question which is about the students' achievement. The third finding answers the third research question which is about the correlation between the students' classroom seating position and the students' achievement. The findings are presented as follows:

The students' classroom seating position. In this part, the reseacher discusses the answer of the first research question. The first research question is "How is the students' classroom seating position?". As explained in the third chapter, the reseacher got the answer of the first research question by distributing the questionnaire to 92 students. In addition, the reseacher analyzed the data by doing the descriptive statistical analysis in SPSS. The researcher also created three
categories for the students' clasroom seating postion, and it was shown in the previous chapter at the table 7 in order to determine the result into one category.

Through that category, the researcher found out the mean of the whole students' answer and the conversion of the mean into one category. The finding shows that the mean of the students' result in answering the questionnaire is 2.37 . Based on the categories, the mean of the students' result 2.37 which is considered in the center row. It means that the students have a center classroom seating position. The table from SPSS is presented below:

| Table. 12: <br> Result of Classoom Seating Position |  |
| :---: | :---: |
| Mean |  |
| N Valid | 92 |
| Missing | 0 |
| Mean | 2.37 |
| Median | 2.38 |
| Mode | 2.48 |

Beside explaining the mean and the result of the classroom seating position, the researcher also explains the result of questionnaire based on the categories in the questionnaire itself. The 21 statements were divided into three categories.

Types of classroom seating position. There are three types of classroom seating position (Ngware et al, 2013). The three types of classroom seating position are in the front, center, and back rows. In this part, the researcher
describes about the result of the types of classroom seating position used by the respondents. The result portrayed in the table below:

| Table. 13: <br> Types of classroom seating position |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Valid | Type | Frequency <br> (F) | Total <br> (N) | Percentage <br> (P) |
|  | Front row | 4 | 92 | 4.4\% |
|  | Center row | 79 |  | 81.4\% |
|  | Back row | 9 |  | 14.2\% |

Based on table 13, it shows that 4 students (4.4\%) chose a front-row seating position. On the other hand, 9 students ( $14.2 \%$ ) chose seating in the back row, and 79 students ( $81.9 \%$ ) tended to choose to sit in the center row. Thus, sitting in the center row position gets the highest response.

The reason of choosing the position. There are two statements (number 5 and 19) that state about reason of choosing the position. (Ngware et al, 2013) stated that one factor associated with improved achievement among learners is the position at which they sit in a classroom. In this part, the researcher describes about the result of the reason of choosing the postion by the students. The result portrayed in the table below:

| Table. 14: <br> The reason of choosing the position. | Percentage |  |  |
| :--- | :---: | :---: | :---: |
| Statement | Agree | Disagree | Mean |
| 5. Usually I choose a seat in the front an <br> center row because it is considered as <br> practical position. | $76.1 \%$ | $23.9 \%$ | 2.94 |


| 19. I choose the classroom sitting <br> position because it affect my <br> achievement. | $22.8 \%$ | $77.2 \%$ | 2.11 |
| :--- | :---: | :---: | :---: |

The table. 14 above shows that are $76.1 \%$ students agree, and $23.9 \%$ students disagree that they choose seat in front and center row (statement number 5), because it is considered as practical position and the mean score was 2.94 meaning that their reason is moderate category. Moreover, there are $22.8 \%$ students agree and $77.2 \%$ students disagree that they choose the classroom sitting position because it affect their achievement (statement number 19) and the mean score was 2.11 meaning that in moderate category. Thus, the students' statements related to their reasons of choosing the position.

The students perceived impacts by seating position. The are sixteen statements belongs to the students perceived impacts by seating position. In this part, the researcher describes about the result of the students perceived impact by seating position. The result portrayed in the table below:

| Table. 15: <br> The students perceived impact by seating <br> position. | Percentage |  |  |
| :--- | :---: | :---: | :---: |
| Statement | Agree | Disagree | Mean |
| 2. Usually when I sit in front row I can <br> perform better. | $42.4 \%$ | $57.6 \%$ | 2.38 |
| 3. When I sit in front row, I can interact <br> with teacher easily. | $69.6 \%$ | $30.5 \%$ | 2.77 |
| 4. When I sit in back row, I got a lower <br> score. | $13 \%$ | $86.9 \%$ | 1.94 |


| 6. Usually when I sit in front and row, I <br> can participate more in the class. | $48.9 \%$ | $51 \%$ | 2.46 |
| :--- | :---: | :---: | :---: |
| 8. Usually when I sit far away from the <br> teacher, it is difficult for me to perform <br> well. | $25 \%$ | $75 \%$ | 2.13 |
| 9.When I sit in the back row, I have <br> difficulties to interact with the teacher. | $22.9 \%$ | $77.1 \%$ | 2.11 |
| 10.Usually when Isit in front row, I have a <br> high achievement and motivation. | $51.1 \%$ | $48.9 \%$ | 2.48 |
| 11.Usually when Isit in back row, I am less <br> than optimal in following the lesson. | $33.6 \%$ | $66.3 \%$ | 2.21 |
| 12.When I sit in back row, it is difficult for <br> me to get A score in my course. | $19.6 \%$ | $79.4 \%$ | 2.16 |
| 14.Usually when I sit in front and center <br> row, I look more active to perform. | $54.4 \%$ | $45.7 \%$ | 2.53 |
| 15.I sit in front row because Iam sure I can <br> perform well. | $38.1 \%$ | $61.9 \%$ | 2.32 |
| 16.When I sit in front row and center row, I <br> tend to be creative and innovative. | $55.5 \%$ | $44.6 \%$ | 2.54 |
| 17. Usually when I sit in the back row <br> during the lesson, I tend to chat with my <br> friends. | $52.2 \%$ | $47.8 \%$ | 2.54 |
| 18. When I sit in the back row, I have the <br> lowest attendance. | $14.2 \%$ | $85.9 \%$ | 1.89 |
| 20. When I sit in the front row, I get more <br> question given by the teacher. | $32.6 \%$ | $67.3 \%$ | 2.33 |
| 21. When I sit in the front row, I get a <br> higher score. | $29.4 \%$ | $70.7 \%$ | 2.22 |

The table above shows that there are $\mathbf{4 2 . 4 \%}$ students agree, and $57.6 \%$ students disagree when they sit in front row they can perform better (statement number 2) and the mean score was 2.38 meaning that the impact of choosing the position is moderate. Next, there are $69.6 \%$ students agree, and $30.5 \%$ students disagree when they sit in front row, they can interact with teacher easily (statement number 3) and the mean score was 2.77 menaing that the impact of choosing the position is moderate. Next, there are $13 \%$ students agree, and $86.9 \%$ students disagree when they sit in back row, they got a lower score (statement number 4 ) and the mean score was 1.94 meaning that the impact of choosing the position is low. Next, there are $48.9 \%$ students agree, and $51 \%$ students disagree when they usually sit in front and row, they can participate more in the class (statement number 6) and the mean score was 2.46 meaning that the impact of choosing the position is moderate.

Furthermore, There are $25 \%$ students agree, and $75 \%$ students disagree when they usually sit far away from the teacher, it is difficult for them to perform well (statement number 8 ) and the mean score was 2.13 meaning that the impact of choosing the position is moderate. Next, there are $22.9 \%$ students agree, and $77.1 \%$ students disagree when they sit in the back row, they have difficulties to interact with the teacher (statement number 9) and the mean score was 2.11 meaning that the impact of choosing the position is moderate. Next, there are $51.1 \%$ students agree, and $48.9 \%$ students disagree when they usually sit in front row, they have a high achievement and motivation (statement number 10) and the mean score was 2.48 menaing that the impact of choosing the position is
moderate. Next, there are $33.6 \%$ students agree, and $66.3 \%$ students disagree when they sit in back row, they are less than optimal in following the lesson (statement number 11) and the mena score was 2.21 menaing that the impact of choosing the position is moderate.

Furthermore, There are $19.6 \%$ students agree, and $79.4 \%$ students disagree when they sit in back row, it is difficult for them to get A score in their course (statement number 12) and the mean score was 2.16 meaning that the impact of choosing the position is moderate. Next, there are $54.4 \%$ students agree, and 45.7\% students disagree when they sit in front and center row, they look more active to perform (statement number 14) and the mean score was 2.53 meaning that the impact of choosing the position is moderate. Next, there are $38.1 \%$ students agree, and $61.9 \%$ students disagree that they sit in front row, because they are sure they can perform well (statement number 15) and the mean score was 2.32 menaing that the impact of choosing the position is moderate. Next, there are $55.5 \%$ students agree, and $44.6 \%$ students disagree when they sit in front row and center row, they tend to be creative and innovative (statement number 16) and the mean score was 2.54 meaning that the impact of choosing the position is moderate. Next, there are $52.2 \%$ students agree, and $47.8 \%$ students disagree when they sit in the back row during the lesson, they tend to chat with my friends (statement number 17) and the mean score was 2.54 meaning that the impact of choosing the position is moderate.

Addition, There are $14.2 \%$ students agree, and 85.9 students disagree when they sit in the back row, they have the lowest attendance (statement number
18) and the mean score was 1.89 meaning that the impact of choosing the position is low. Next, there are $32.6 \%$ students agree, and $67.3 \%$ students disagree when they sit in the front row, they get more question given by the teacher (statement number 20) and the mean score was 2.33 meaning that the impact of choosing the position is moderate. The last, there are $29.4 \%$ students agree, and $70.7 \%$ students disagree when they sit in the front row, they get a higher score (statement number 21) and the mean score was 2.22 meaning that the impact of choosing the position is moderate. Thus the students' statements related to their perceived impacts by seating position.

Students' achievement. In this part, the reseacher discusses the answer of the second research question. It is "How is the students' achievement?". As explained in the third chapter, the reseacher got the answer of the second reseacrh question by GPA of the students. In addition, the reseacher analyzed the gethered data by doing the descriptive statistical analysis in SPSS. The researcher also created three categories for the students' achievement, and it was shown in the previous chapter at the figure 8 in order to determine the result into one category.

Through those categories, the researcher found out the mean of the whole students' answers and the conversion of the mean into one category. The finding shows that the mean of the students' result is 3.20 . Based on the categories, the mean of the students' result is 3.20 which is considered high. It means that the students have a high achievement. The table from SPSS is presented below:

| Table.16: <br> Result of Students' Achievement |  |
| :---: | :---: |
| Mean |  |
| $\mathrm{N} \quad$ Valid | 92 |
| Missing | 0 |
| Mean | 3.20 |

## Normality test

Before analyzing the data, the researcher checked whether the distribution of the sample is considered normal or not. To know about that, the researcher checked it by doing the normality test. In this part, the researcher showed whether the sample of this research is normal or not. The distribution of the data is considered as a normal data if the result of Kolmogorov- Smirnov is higher than $0.05(\alpha>0.05)$. In contrast, the data is considered not normal if the result of Kolmogorov- Smirnov is lower than $0.05(\alpha<0.05)$. The result of the normality test is shown in the table below:

Table 17:
Result of Normality Test

|  | Kolmogorov- <br> Smirnov $^{\mathrm{a}}$ |  |  |  | Shapiro-Wilk |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Statistic | Df | Sig. | Statistic | Df | Sig. |  |
| SEATINGPOSITION | , 092 | 92 | $\mathbf{, 0 6 7}$ | , 978 | 92 | , 139 |  |
| STUDENTSACHIEVEVEMNT | , 064 | 92 | , $\mathbf{2 0 0}^{*}$ | , 961 | 92 | , 011 |  |

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

The table. 17 above indicated that the result of the normality test from classroom seating position and students' achievement are 0.67 and 2.00. It means that the result of Kolmogorov - Smirnov is higher than 0.05 , and it also means that the distribution of the data is normal. The result of the normality test also can be shown and concluded from the probability plot from SPSS. The data is normal data if the data is close to the diagonal line, and the data of this research is close to the diagonal line. The plot is presented below:


Figure 2. Plot of Normality


Figure 3. Plot of Normality

## The correlation between classroom seating position and students

achievement. In the third finding, the researcher discusses the answer of the third research question. It means that the researcher wants to find out the possibility of the relationship between those two variables.

| $\begin{array}{l}\text { Table. 18: } \\ \text { Result of Correlations }\end{array}$ | Correlations |  |  |
| :--- | :--- | :--- | :--- |
|  | $\begin{array}{c}\text { SEATINGPOSIT } \\ \text { ION }\end{array}$ | $\begin{array}{c}\text { STUDENTACHIEVE } \\ \text { MENT }\end{array}$ |  |
|  |  |  | 1 |$)$

From the table. 18 the result of the Pearson Correlation ( $r$-value) is 0.230 , and the result of significant value ( $\rho$-value) is 0.027 . This research accepts H1 which is there is correlation between classroom seating position and students achievement by comparing the result of significant value ( $\rho$-value). If the result of the significant value is lower than 0.05 , it means that there is correlation between the variables. It is supported by Cohen, Manion, and Morrison (2011) who stated that, "Coefficient statistics are statistically significantly correlated at the $\rho<0.05$ levels" (p. 345). Moreover, the result of the significant value of this research is 0.027, and it means that this research accepts H1. In addition, there is positive correlation between classroom seating position and students' achievement. Furthermore, based on the result of the ( $r$-value), the correlation considered as a positive correlation since it is nearer to +1 rather than -1 .To know the interpretation of the coefficient correlation, the researcher used the result of the

Pearson Correlation value ( $r$-value). The interpretation of the coefficient correlation according to Borg (1963) portrayed in the table below.

| Table. 19: <br> Correlation Coefficient Interpretation <br> Standard $\mathrm{r} \mathrm{x}, \mathrm{y}$ <br> $0.00-0.20$ <br> $0.21-0.35$ <br> $0.36-0.65$ <br> Interpretation <br> $0.66-0.85$ <br> $>0.85$ |  |
| :---: | :---: |
|  | Wery weak correlation correlation |

The interpretation above used to interpret the result of the correlation. The Pearson Correlation value ( $r$-value) of this research is 0.230 . According to the table of correlation coefficient interpretation, the Pearson Correlation value ( $r$ value) of this research is interpreted as weak correlation ( $0.21-0.50$ ). As a result, there is positive correlation between classroom seating position and students' achievement, and the level of the correlation is in weak correlation.

Hypothesis test. The hypothesis test is used to know whether this research accepts the hypothesis of this research or ignores the hypothesis of this research. The hypothesis of this research is there is a correlation between classroom seating position and students' achievement. The hypothesis test is also used to answer the third research question which is about the correlation between those two variables. The researcher undertook the hypothesis test after finding the first research question which is about the classroom seating position and after finding the
second research question which is about students' achievement. To find the result of the third research question, the researcher took the result of the first and the second finding which are the means. The mean of the first finding is 2.37 meaning that the students tend to sit in the center row, and the mean of the second finding is 3.20 meaning that the students tend in high achievement.

## Discussion

This part describes the discussion of the three research questions. The first research questions aims to find out classroom seationg position. The second research question is to find out students' achievement. The third research question is to find out the correlation between classroom seating position and students' achievement. The discussion is explained below:

Classroom seating position. This research discovers that the position of the students' seat in the classroom is in center row position category which has the mean 2.37. The researcher found out the result based on the frequency in types, the students' reason of choosing the position, and students perceived impact of seating position.

First, based on the finding, the students determine their seating position based on three types; they are in the front, center, and back rows. It supports Ngware et al (2013) who stated that there are three kinds of seating position; those are in front, center, and back row. The finding points out that the types in classroom seating position is 2.37 , means center row position. The students frequently use that type, because according to the researcher observations when
taking data, the researcher saw that most of the students sat in the center row to the back row, and the front row was not used.

Second, this study includes an analysis of the reasons when choosing the seating position. The result shows that more than half of the students (76.1\%) agree that the reason they sit in the front and center row are considered as practical position. Meeks et al (2013) stated that students who sit toward the front and center of the classroom in action seats see themselves as practical and imaginative. However, few of the students (22.8\%) agree that seat position may affect their achievement. It can be concluded that the reason they chose the position of seat was because they considered the front and center row may affect their achievement. This also shows that has a significant correlation in weak category. Parker et al (2011) found that students seating position correlated with course performance and students' GPA.

Third, the researcher stressed an impact of classroom seat position and students' achievement. The students who sit in the front row will easily understand the material, and they have an easier time getting a good score. Unlike the students who sit in the back row, they have the opportunity to not to pay attention to the teacher's explanation, because their seat position is too far from the teacher attention. According to Gremmen et al (2016), students who sit in the front row will actually produce a higher score than those who sit in the back row.

From 16 statements about the impact of seating position, the researcher concluded that most of the students disagree when they sit in the back row, they have difficulty to participate in classroom, have less attention, have less
attendance, and have a low score. It is supported by Meeks et al (2013) who found out that there is no relationship between seating position and student outcomes. The students who enter the classroom first can select desirable seats, while those who are late do not have chance to choose their seats, and they have no other option. Stires (2013) found out that no grade differences between students who chose to sit at the front of the class, and students who chose at back row. Accordingly every student has their own motivation and belief, and classroom seating position does not always have a negative impact for the students.

Students'achievement. This research also discovers the students' achievement. The mean of the students' achievement result is 3.20 . Based on the range criteria of interpretation, the result is in high achievement category. An achievement is the maximum result achieved by a person after they make the effort through learning. Wannarka and Ruhl (2008) indicated that an achievement is a proof of success that has been achieved by someone after the learning process.

## Correlation between classroom seating position and students'

 achievement. This research was conducted to know the relationship between classroom seating position and students' achievement. The result of this research accepts H1 (p-value) which is 0.027 , and it is lower than 0.05 . It means that there is a positive correlation between classroom seating position and students' achievement. The Pearson correlation value (r-value) of this research is 0.230 which indicates that the interpretation of the correlation between two variables is in weak correlation (0.21-0.35).The positive correlation between classroom seating position and students' achievement is in center position (2.37) and high achievement (3.20). The selection of seats is determined by the consideration of the students through the position, the reasons for choosing position, and students perceived impact by seating position. It is supported by Fernandes et al (2011) who stated that the selection is related to academic achievement and student participation in the classroom. Therefore, the students who choose a seat that appropriate with their ability may affect their achievement in class.

The finding of this research supports the prior study conducted by Malif, Sabastiano, Cardoso, and Meirelles (2015) investigated the relationship between students' positions in the classroom and school performance. The aim of that research is to analyze whether or not the position of students in classroom is correlated with academic performance, and which factors might be involved. The result of their research was students who sit in the front row have a better performance, and they only miss a few classes. Moreover, the main reason to sit in a front position is their motivation for learning. However, in this research the reseacher found that seating position is not main factor affecting students' achievement. It depends on the students' consideration and motivation in learning. Thus, a study conducted by Malif, Sabastiano, Cardoso, and Meirelles (2015) strongly supports this research's findings since the main factor that affects students condiration when determine the seat position is students motivation.

