CHAPTER FOUR

Data Analysis, Results and Discussions

4.0 Introduction

This chapter deals with data analysis and discussion of the study's results in which the researcher will analyze the data collected via two tools; a test (pre/posttest design) and a questionnaire. Then, the data is presented and explained and the results are discussed based of the study hypotheses. However, the following are some statistical methods are used in this study:

1. Frequency Distribution.
2. Graphs and Charts
3. Percentage.
4. Median of the respondent's trends.
5. Chi- square Test.
6. P- Value.
7. T. test.

To obtain the results of this study, the researcher characterized these results with as an exact accuracy as possible through the use of SPSS techniques.

4.1. Correlation

To measure the strength of the relationship between the independent variable (the effectiveness of Discourse Markers) and the dependent variable (The enhancement of EFL students' Listening comprehension) in terms of subjects' scores on a pre/post-test and a questionnaire), Pearson Product Moment Correlation is used. Where, the result of the computation for (r is 0.74). See the table below;

Table (4.1.): Ranges and Interpretation for Various Correlation Coefficients for the Test

0.8 to 1.0	Very strong
0.6 to 0.8	Strong
0.4 to 0.6	Moderate
0.2 to 0.4	Weak
0.0 to 0.2	Very weak

Table (4.2): Ranges and Interpretation for Various Correlation Coefficients for the Questionnaire

0.8 to 1.0	Very strong
0.6 to 0.8	Strong
0.4 to 0.6	Moderate
0.2 to 0.4	Weak
0.0 to 0.2	Very weak

4.2 Questions of the Study

The study tries to analyze the following questions:

1. To what extent can EFL students enhance their listening comprehension of academic lectures if they are made aware of the effective role of spoken discourse markers?

2. What categories of discourse markers that mostly enhance EFL students' listening comprehension of academic lectures in the treatment programme?

3. Would there be a significant statistical difference between the pre-test and post-test scores suggesting that the treatment programme of discourse markers can benefit EFL students' listening comprehension of academic lectures?

4.3 Study Hypotheses

1. EFL students can enhance their listening comprehension in academic lectures if they are made aware of the effective role of discourse markers.

2. The macro and micro discourse markers categories are the most affecting types that enhance EFL students' listening comprehension of academic lectures in the treatment programme.

3. There would be a significant statistical difference in the pre- and post-test scores suggesting that the treatment programme of discourse markers can benefit EFL students' listening comprehension of academic lectures.

The acceptance or rejection of the hypotheses depends on whether there would be a statistical difference resulted from the comparison between the participants' scores in the pre and post-test. Also, the acceptance of these hypotheses depend on whether there would be a statistical difference resulted from the questionnaire analysis.

To test the hypotheses, the researcher used t-test and SPSS programme for showing the differences between the means of the two samples at (0.05) level of significance; the test and the questionnaire.

4.4 Data Analysis

This study adopted two tools for data collection; a test and a questionnaire. Then, data is analyzed through the using of Statistical Package for Social Sciences (SPSS) programme.

4.5 Analysis of the Test

The researcher gathered a quantitative data from the participants of the two groups by means of pre/posttests design. These students' tests became a rich source of background data after the post tests have been done by (90) EFL students. Firstly, it gave the experimental group an insight into the functions of discourse markers. Secondly, it raised their awareness in the skill of listening comprehension of academic discourse through DMs. The following tables show the test results.

Table (4.3) t-test results of the control and experimental groups before training the experimental group (pretest).

Value	No	Mean	Std. Deviation	T	Df	Sig. (2-tailed)	Scale
Experimental Group	45	54.22	10.921	1.312	44	0.19	Insignificant
Control Group	45	51.69	10.518				

The calculated value of t.test in table (4.3) has signified differences between the numbers of participants of the study as a value of (1.312) with a sigma of (0.19) which is more than the level of significant value (5%) that means there were no significant differences between the results of the two groups. What could be noticed at this stage of the test (pretest), the two groups of participants' scores have no significant differences as shown in the above table. Then, these groups results interpreted as follows; (The experimental with M = 54.22 and SD =10.921 whereas, the control with M = 51.69 and SD =10.518). So, it appeared as if both groups attended the lecture and the test before they had been got aware of the effective role of discourse markers in the lectures. Therefore, the hypothesis one is confirmed to be valid.

Table (4.4) t-test results of the control and experimental groups in gaps filling section before the treatment programme for the experimental group.

Value	Mean	Std. Deviation	T	Df	Sig. (2-tailed)	Scale
Experimental Pre-filling the gaps	25.93	9.776				
			0.210	44	0.83	Insignificant
Control Pre-filling the gaps	26.33	7.416				

The calculated value of t.test in table (4.4) has signified the differences between the participants' scores in the pretest (section one) for the first hypothesis was (0.210) with a signified value of (0.83) which is more than the level of significant value (5%). In which, the experimental with M = 9.776 and SD =10.921. Whereas, the control with M = 26.33 and SD =7.416. However, that means there were no big significant differences between the two results. Doubtless, it could be assumed that the both groups of the participants were not aware of the effective role of discourse markers in enhancing listening comprehension. What is observed here, that EFL students uninformed of the

key answers of gap filling section, by means of considering discourse markers. Therefore, this result supports the first hypothesis of this study.

Table (4.5) t-test results of the control and experimental groups in the multiple choice section before the treatment programme for the experimental group.

Value	Mean	Std. Deviation	T	Df	Sig. (2-tailed)	Scale
Experimental pre- multiple choice	23.82	6.191	-1.889	44	0.00	significant
Control pre- multiple Choice	26.22	7.242				

The value of t.test in table (4.5) has calculated to signify the differences between the two groups' results in the posttest (section two) of the first hypothesis was   (-1.889) with signified value of (0.000) which is lower than the level of significant value (5%) These refer to an existence of slight statistical difference for the control group in the pre-multiple choice section. However, this difference is no longer being considered unless this group (control) will be tested again in the post-test after conducting the treatment programme for the experimental group. Therefore, the hypothesis one is true.

4.5.1 Discussion and Interpretations of the Results

This section discusses the test results and deals with the study hypotheses comprising them to the above statistical tables.

The answer of the first question of this study includes that, EFL students' awareness of discourse markers enhances their listening comprehension of academic lectures. Therefore, the acceptance or rejection of the hypothesis depends on EFL students' awareness of the role of discourse markers in enhancing listening comprehension. For testing that, firstly the pretest was designed for those participants consisted of twenty questions and

each correct answer was awarded two marks. After that, the participants' scores of the test were calculated and the means of the experimental and the control groups were compered, it was found that, the scores of both groups in the pre-test was insignificant as shown in table (4.3). This could lead to the assumption that both groups have the same background knowledge of discourse markers as enhancing genre in EFL listening comprehension.

4.5.2 Verification of the First Hypothesis

To verify the first hypothesis, the researcher marked the two tests of the two groups (the control and the experimental) of EFL students for adherence to their awareness of discourse markers in listening comprehension of academic lectures. Accordingly, the results of the statistical analysis, as depicted above in table (4.3) has showed insignificant value of (0.19) which indicates that EFL students' awareness of listening comprehension in academic lectures is not developed to extract content information through the DMs. Therefore, this hypothesis is successfully tested and proved.

Table (4.6) t-test results of the control and experiment groups after the treatment programme for the experimental group (posttest).

Value	No	Mean	Std. Deviation	T	Df	(2-tailed)	Scale
Experimental	45	69.80	10.541	8.796	44	0.00	significant
Control	45	51.89	11.692				

The value of t-test in the above table (4.6), has calculated to signify the differences between the study's participants of the posttest. However, the value of the test was (8.796) with a significant value of (0.00) which is lower than the level of significant value (5%). This refers to an existence of statistical differences for the experimental group. What should be noted at this

stage is that, the score of the experimental group in the post-test revealed a significant representation because of the treatment programme.

Table (4.7) t-test results of the control and experiment group in the gaps filling section after the treatment programme for the experimental group. (Posttest)

Value	Mean	Std. Dev	T	Df	Sig. (2-tailed)	Scale
Experimental post-filling the gaps	34.89	5.982	6.564	44	0.00	significant
Control post-filling the gaps	25.78	7.534				

The calculation of t-test in the above table (4.7) has shown the differences between the participants 'scores in the first section of the test as; a value of (6.564) with a significant value of (0.000) which is lower than the level of significant value (5%). However, what was exposed in this result, there was an existence of statistical difference for the experimental group. Consequently, what is noted in this type of test, the experimental group has a higher rate of a mean (34.89) than the control group of (25.78) mean. It is clear that the treatment programme had enabled the experimental group answered this question through the understanding of macro DMs categories.

Table (4.8) t-test results of the control and experimental groups in the multiple choice section after training the experimental group.

Value	Mean	Std. Deviation	T	Df	Sig. (2-tailed)	Scale
Experimental post- multiple choice	34.76	7.100	6.503	44	0.00	significant
Control post-multiple choice	26.22	7.242				

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Table (4.8) shows the calculated value of t.test signifies that, the differences between the numbers of participants of the second part of the posttest was (6.503) with signify value (0.000) which is lower than the level of significant value (5%) These refer to an existence of statistical difference for the experimental group in the post-multiple choices question. Therefore, this result has shown that the training programme on the discourse markers improved students' scores on this question. Therefore, the answer of the second question is true.

The answer of the second question of this study is that, the macro and micro discourse markers categories are mostly effective types in enhancing EFL students' their listening comprehension of academic lectures in the treatment Programme. Therefore, the acceptance or rejection of this hypothesis depends on whether EFL students are aware of these effective categories of discourse markers in enhancing listening comprehension or not. For testing this hypothesis, there was a test designed for those participants in terms of two sections; filling the gabs and multiple choice questions. These two sections of test as follows;

A) The First Section of the Test

The first part of the test consisted of ten filling the gaps questions. It assessed whether the participants were able to select details introduced by means of macro discourse markers categories from the spoken text. An example of such a question is:

  a. So we are going back to the history and have a look at………………………….………...
  b. ah..you know! Just like; …………………….…… from one period of time to the other
  c. So, anyway when they came stayed for sometimes they brought their language with them. Which is, ……………………….………... language.

The answers to these questions were introduced by means of macro discourse markers categories such as; "So we are going back to... "ah.. you know! ... "So, anyway...The aim of the gaps-filling question was to establish whether bits of information highlighted by means of discourse markers were easier for students to assimilate, should they be aware of the role discourse markers play in simplifying the lecture text.

It is noticed that, the performance of both groups (the control and the experimental) in the pre-test calculated that there was no significant difference between the two groups at the beginning of the Programme as shown in table (4.3). However, then the researcher compared the performance of the experimental group in the pretest and posttests of filling in the gabs part. After calculating the tests results it was shown in table (4.6) that, there was significant differences had occurred in the part of the post-test. Therefore, the treatment Programme of teaching these categories (macro) of DMs has improved EFL students listening comprehension of the lecture.

B) The Second Section of the Test

The second part of the test consisted of ten multiple choice questions. It assessed whether the participants were able to select details introduced by means of micro discourse markers categories from the spoken text. An example of such a question is:

1. Actually, Greek language influence is quite small just 6%, they are kinds of words that are used in a sort of........................... life.

   a) practical   b) historical   c) science   d) academic

2. Exploration and the discovery of America brought new words for items imported to Britain, such as ....

   a)   Apples and oranges (b) tobacco and potato (c) onions and carrots (d) beans and peas

The answers of these questions were introduced by means of micro discourse markers categories such as; "and ... sort of ... such as……So," The aim of the multiple choice questions was to establish whether bits of information

highlighted by means of discourse markers were easier for students to integrate, should they be aware of the role of discourse markers that play in simplifying the lecture contents.

It was shown in table (4.3) that, the performance of both groups (the control and the experimental) in the pre-test calculated that there was no significant difference between the two groups at the beginning of the Programme. However, the researcher compared the performance of the experimental group in the pretest and posttests of the multiple choice questions part. And then, after calculating the tests results as shown in table (4.6) determined that there was significant differences had occurred in the part of the post-test. Therefore, the treatment programme of teaching these categories of DMs improved EFL students listening comprehension of the lecture text.

4.5.3 Verification of the Second Hypothesis

To verify this hypothesis, the researcher marked the two parts questions of posttest of the experimental group for adherence to the effectiveness of macro and micro categories in enhancing listening comprehension of academic lectures. Accordingly, the results of the statistical analysis, as depicted above in table (4.6) of posttest for the experimental group showed that, (0.000) this indicates that the treatment programme of teaching DMs to EFL students developed and improved their listening comprehension of the lecture. Therefore, this hypothesis is successfully tested and confirmed true.

Table (4.9) t-test results of the experiment group in the pre/posttests scores.

Value	Mean	Std. Deviation	T	Df	Sig. (2-tailed)	Scale
Experimental Pre-test	54.22	10.921	-13.313	44	0.00	significant
Experimental post test	69.80	10.541				

The value of t.test in table (4.9) has calculated to signify the differences between the numbers of participants of the pre/posttests of the experimental group. The result has shown that, the pretest mean was (-13.313) with signify value (0.000) which is lower than the level of significant value (5%). These refer to the existence of statistical differences in the posttest with M = (54.22) and SD= (10.921).Whereas, in the posttest with M= (69.80) and SD= (10.541). Therefore, these results have a significant value to question three of this study.

Table (4.10) t-test results of the control group in the pre/posttests scores.

Value	Mean	Std. Deviation	T	Df	Sig. (2-tailed)	Scale
Control pre	51.69	10.518	-0.209	44	0.83	Insignificant
Control post	51.89	11.692				

The value of t-test in above table (4.10) has calculated to signify the differences between the numbers of participants of the pre/posttests of the control group. That value was (-0.209) with a signified value of (0.83) which is more than the level of significant value (5%). It means that, there are no significant differences between the pretest and posttest in this group. Moreover, this group of participants who represented the control group their results are no longer be considered statistically but it goes paralleled with the experimental group in terms of the tests design.

Accordingly, the answer of the third study question is; there are significant statistical differences in the pre-test and post-test scores suggesting that the treatment programme benefitted EFL students' listening comprehension. However, the acceptance of this hypothesis depends on the significant statistical differences in the pre-test and post-test scores of the experimental group. Nonetheless, when the participants' scores were calculated and then, the researcher compared the means of the experimental groups' performances. Probably, it determined that, there were significant

statistical differences in the pre-test and post-test scores for the group that have subjected to treatment Programme. This could lead to the assumption that, the experimental group have been raised their awareness of DMs in the posttest.

4.5.4 Verification of the Third Hypothesis

For verifying this hypothesis, the researcher has marked the two parts questions of the posttest of the experimental group for adherence to significant statistical differences in the pre-test and post-test scores of the group that have subjected to the treatment Programme. Accordingly, the results of the statistical analysis, as depicted above in table (4.9) has shown a significant value of (0.000) which is lower than the level of significant value (5%). This result indicates that the performance of the experimental group in the post test revealed statistical significant differences. Therefore, the third hypothesis of this study is successfully tested and valeted to be true.

4.6. Analysis of the Questionnaire

In order to reach the objectives of this study the researcher has gathered a quantitative data by means of a questionnaire from respondents who are university teachers. This questionnaire reflects the attitudes of the participants about the role of discourse markers in enhancing listening comprehension of academic lectures. However, in order to address the research questions the participants responded to questionnaire's items, indicating the degree to which they agreed or disagreed (Likert Scale) with questionnaire's statements. This is concerning their attitudes towards the effectiveness of discourse markers in lectures listening comprehension. The mean and standard deviations were computed on the participants' responses to the items and presented in table (4.2). For more details, the tables below show the results and address the questionnaire's statements for answering the study questions.

4.6.1 Questions One

1. To what extent can EFL students enhance their listening comprehension of academic lectures if they are made aware of the effective role of spoken discourse markers?

The following tables show the statistical analyzed-data of the questionnaire's statements for answering question one:

Table (4.11) EFL students should be aware of discourse markers values to enhance their listening comprehension of the lectures.

Value	Frequencies	Percentage %
Strongly agree	27	60.0%
Agree	17	37.8%
Neutral	1	2.2%
Disagree	0	0.0%
Strongly disagree	0	0.0%
Total	45	100.0%
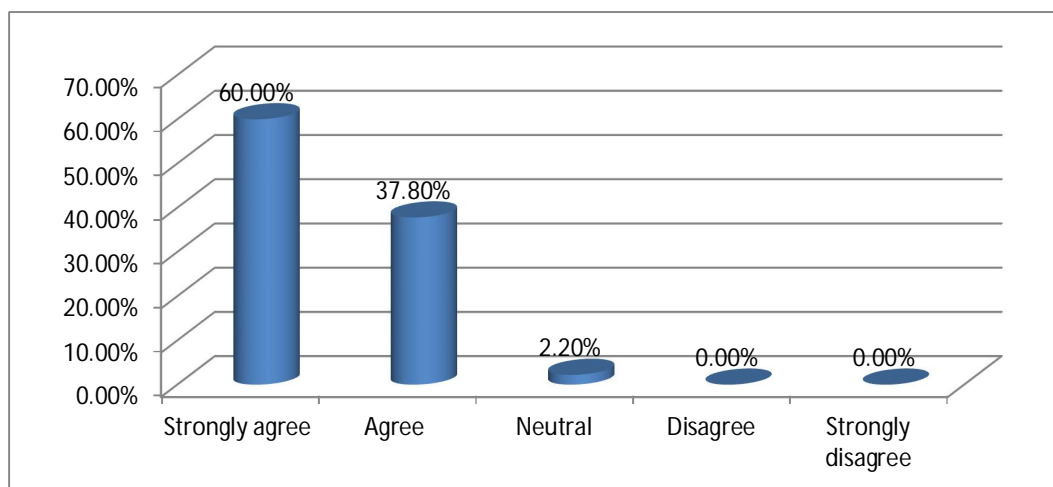
The results of the table (4.11) illustrate the quantitative data from the questionnaire's statement; (EFL students should be aware of discourse markers values to enhance their listening comprehension of the lectures) which indicated that, the respondents who were; strongly agreed (60.0%) and

(37.8%) agreed, whereas, only (2.2%), neutral and (0.0%), were disagreed and strongly disagreed. In general, besides the assumption of the researcher, those EFL students should be aware of DMs in listening comprehension of the lecture, it was found that, over (90%) of the respondents have positive attitudes towards the above statement.

Table (4.12) EFL students are not aware of the effectiveness of discourse markers in enhancing listening comprehension of the lecture.

Value	Frequencies	Percentage %
Strongly agree	13	28.9%
Agree	29	64.4%
Neutral	2	4.4%
Disagree	1	2.2%
Strongly disagree	0	0.0%
Total	45	100.0%
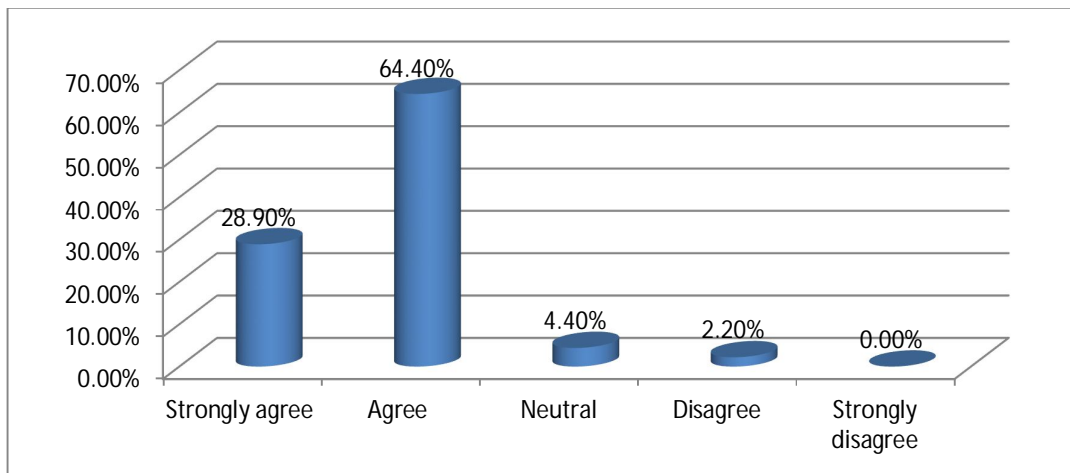
The results in the above table (4.12) illustrates that the respondents' views of the above statement were (28.9%) strongly agreed, (64.4%) agreed, neutral by (4.4%), (2.2%) disagreed, and (0.0%) were strongly disagreed. Generally, this result indicates that (92%) of the respondents have agreed on the fact the EFL students are not aware of the effective role of discourse

markers in enhancing their listening comprehension of the lectures. Therefore, there is a clear advantage for the values in scale of agree.

Table (4.13) EFL students have a limited knowledge of discourse markers in enhancing listening comprehension of the lectures.

Value	Frequencies	Percentage %
Strongly agree	20	44.4%
Agree	19	42.2%
Neutral	5	11.1%
Disagree	1	2.2%
Strongly disagree	0	0.0%
Total	45	100.0%
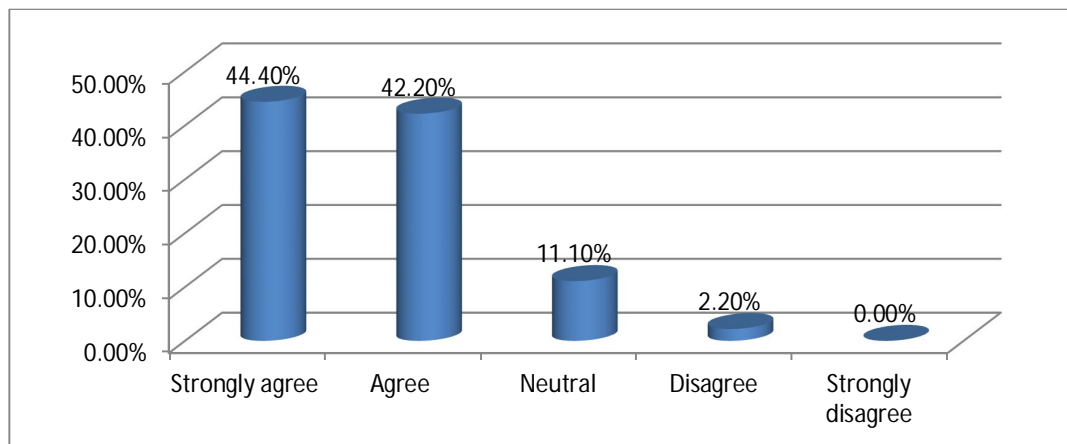
The information which was derived from the above table (4.13) has shown that, (86.6%) of respondents agreed on the fact that EFL lack the qualities of discourse markers which enhance EFL listening comprehension. Whereas, only (13.4%) were responded as; neutral (11.1%) and disagree (2.2%). This result has appeared that EFL students as indicated above their listening comprehension was limited or even low and have had poor understanding of the lectures. So, this fact supports the hypothesis of the study.

Table (4.14) EFL students' awareness of discourse markers makes effective interactional features though it enhances their listening comprehension of the lectures.

Value	Frequencies	Percentage %
Strongly agree	13	28.9%
Agree	27	60.0%
Neutral	4	8.9%
Disagree	1	2.2%
Strongly disagree	0	0.0%
Total	45	100.0%
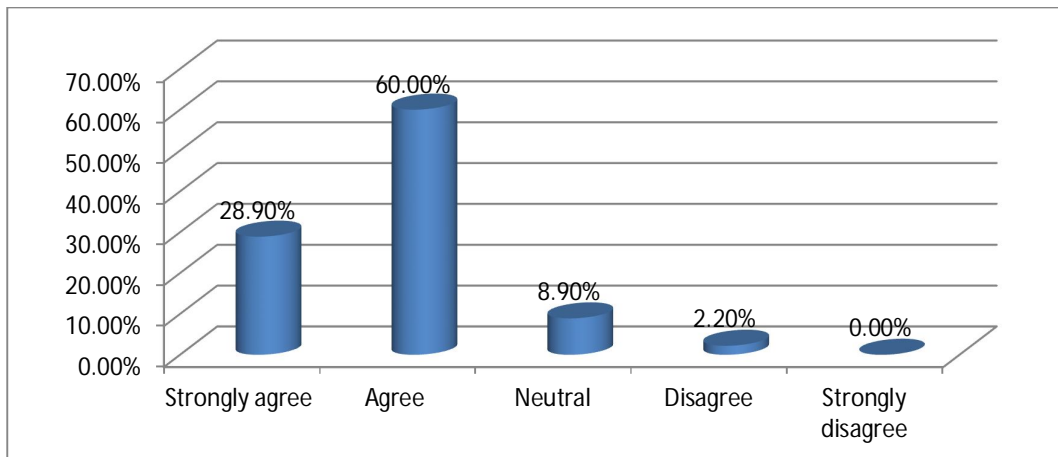
Table (4.14) illustrates the views of the respondents of the statement (students' awareness of discourse markers makes effective interactional features though it enhances their listening comprehension of the lectures.) However, those who responded by strongly agree (28.9%), agree by (60.0%), neutral by (8.9%), disagree by (2.2%), and strongly disagree by (%0.0).When this data was analyzed and considered, it reflected that (88.9%), of the respondents agreed with the raised statement. Although, there were other skills that raised the interaction of the lectures, but they are not regarded as adequate styles for tertiary studies at universities. Therefore, this statement is valid.

Table (4.15) Discourse markers are important clues in directing EFL students' attention in the lectures.

Value	Frequencies	Percentage %
Strongly agree	20	44.4%
Agree	19	42.2%
Neutral	6	13.3%
Disagree	0	0.0%
Strongly disagree	0	0.0%
Total	45	100.0%
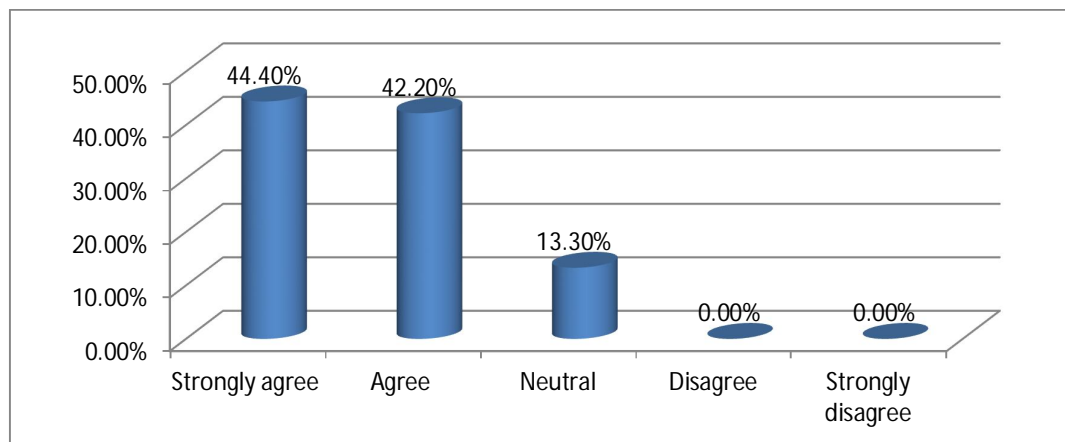
As shown in Table (4.15) which illustrates the views of the respondents to the statement ;(Discourse markers are important clues in directing EFL students' attention in the lectures) by strongly agree (44.4%) and agree by (42.2%) and neutral by (13.3%) and disagree by (0.0%) and strongly disagree by (0.0%).These results reflect that there are many important expressions of discourse markers such as; (*please listen to this ... look at this point....... and you know it is ...... are you following me)* can be used by lecturers to direct students' listening attention to the topic of the lecture in order not to interrupt the flow of the lecturer's speech. So, these words or expressions required skills from students to catch up the lecture's contents whenever these directors

of discourse markers are used by the teachers. Therefore, the result which is derived from the respondent's views has agreed value.

Table (4.16) chi-square test results for respondents answering the first five statements of the questionnaire.

No	Statements	Chi square value	df	Sig.	Median	Interpretation
1	EFL students should be aware of discourse markers values to enhance their listening comprehension of the lectures.	22.93	2	0.000	5.00	strongly agree
2	EFL students are not aware of the effectiveness of discourse markers in enhancing listening comprehension of lectures.	45.22	3	0.000	4.00	Agree
3	EFL students have a limited knowledge of discourse markers in enhancing listening comprehension of the lecture.	24.95	3	0.000	4.00	Agree
4	EFL students' awareness of discourse markers makes effective interactional features in enhancing listening comprehension of lectures	36.33	3	0.000	4.00	Agree
5	Discourse markers are important clues in directing EFL students' attention in the lectures.	8.13	2	0.017	4.00	Agree

4.6.2 The Interpreted of Results for the above Table (4.16)

1. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement; "FL students should be aware of discourse markers values to enhance their listening comprehension of the lectures." was (22.933) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of statistical differences.

2. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement "EFL students are not aware of the effectiveness of discourse markers in enhancing listening comprehension of the lecture." was (45.222) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

3. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement "EFL students have a limited knowledge of discourse markers in enhancing listening comprehension of the lectures." was (24.956) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences.

4. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement "Discourse markers work as effective interactional features in enhancing EFL students' listening comprehension of lectures" was (36.333) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

5. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement; "Discourse markers are important clues in directing   EFL students' attention in the lecture" was (8.133) with P-value (0.017) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

4.6.3 Results and Discussion of the First Question

According to the discussed-data of table (4.11) which indicated that (87.7%) of the participants have strongly agreed on that, EFL students should be aware of discourse markers values. And also, the data of table (4.12) indicated that, (93.3%) of the respondents have agreed that, EFL students are not aware of the effectiveness of discourse markers in enhancing listening comprehension of the lectures. Moreover, in table (4.13) which reflected that (86.6%) of the respondents have agreed on the fact that, EFL students have a limited knowledge of the role of discourse markers in listening comprehension. Furthermore, the table (4.14) indicated that (68.9%) of the participants have agreed on that, EFL students' awareness of discourse markers makes effective interactional features in enhancing listening comprehension of lectures. In addition, to the table (4.15) which reflected that, (86.6%) of the participants strongly agreed on the importance of DMs as clues in directing EFL students' attention. Accordingly, these all results have answered question one with a statistical significant value.

4.6.4 Verification of the First Hypothesis

To verify this hypothesis, the questionnaire's answers are statistically analyzed and discussed for adherence to the significant statistical differences among the respondents' views. Accordingly, the result of the statistical analysis, as depicted above in table (4.16) has signified value of (0.000) and median of (03) this indicates that teachers' response revealed statistical differences. Therefore, the first hypothesis is successfully tested and verified true.

4.6.5 Questions Two

- What categories of discourse markers that mostly enhance EFL students' listening comprehension of academic lectures in the treatment programme?

The following tables show the analysis and discussions of the second question of the study which explained in terms of five statements.

Table (4.17) EFL students can comprehend lectures when micro discourse markers such as; *so, and, because…etc.* are used.

Value	Frequencies	Percentage %
Strongly agree	16	35.6%
Agree	23	51.1%
Neutral	5	11.1%
Disagree	1	2.2%
Strongly disagree	0	0.0%
Total	45	100.0%
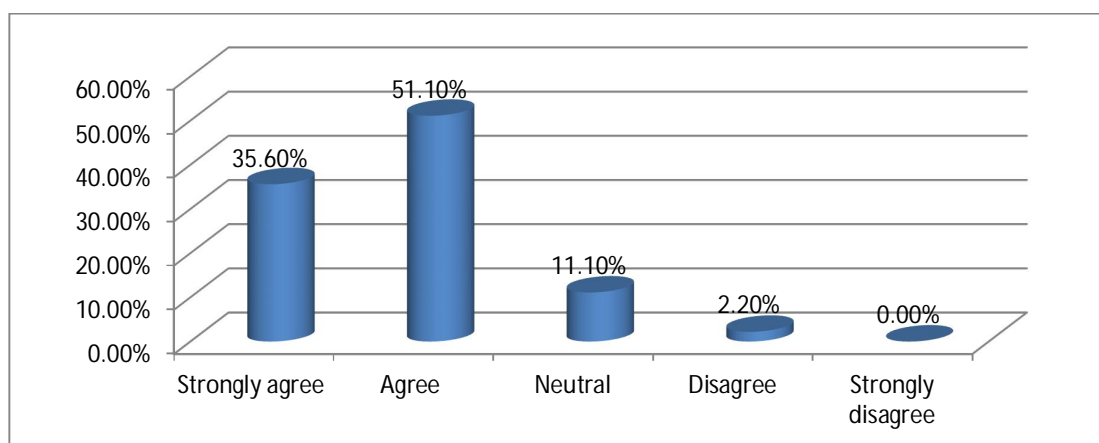
The table (4.17) illustrates the percentage of the teachers' attitudes towards the statement; (EFL students can comprehend lectures when micro discourse markers such as; so, and, because…etc. are used).Yet, it has displayed that, (35.6%) of the respondents have strongly agreed with the above sample and (51.1%) of the respondents have agreed. Whereas, (11.1%) were neutral plus (2.2%) were disagreed and (0.0%) strongly disagreed. The researcher considered that, micro discourse markers are the adhesive markers of the discourse in a way that help top-down processing of listening. So these categories of markers enhance EFL students listening comprehension of the

lectures. Thus, when the data were resulting from teachers' opinions it has revealed a significant value to the above sample.

Table (4.18): EFL students can comprehend the lectures when the macro discourse markers (okay, *you know, I mean ...* etc.) are used.

Value	Frequencies	Percentage %
Strongly agree	18	40.0%
Agree	17	37.8%
Neutral	8	17.8%
Disagree	1	2.2%
Strongly disagree	1	2.2%
Total	45	100.0%
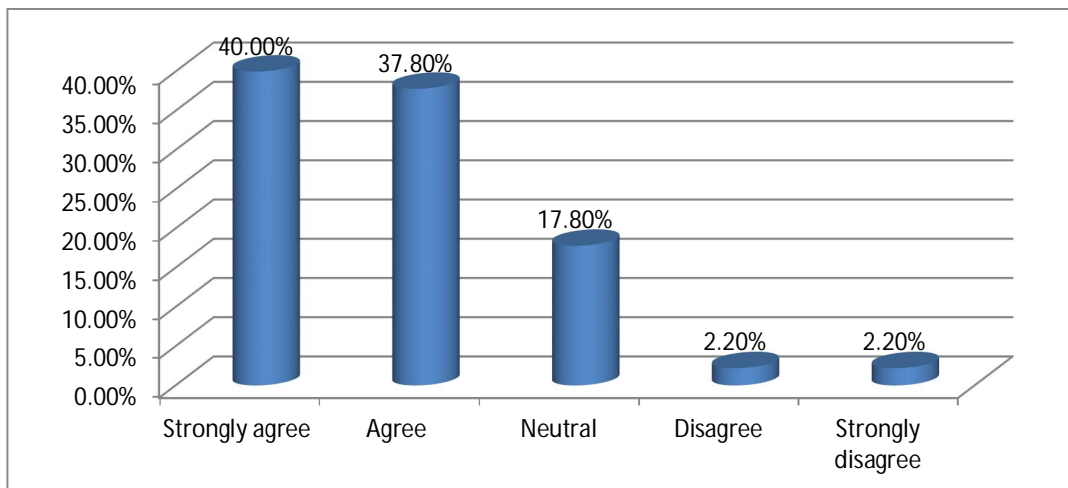
The data in table (4.18) illustrates that EFL students can comprehend the lectures when the macro discourse markers are used. Yet, the views of the respondents of this sample are as follows; (40.0%) of the respondents have strongly agreed and (37.8%) have agreed whereas, (18.8%) were neutral and who have disagreed by (%2.2) and strongly disagreed by (2.2%). Subsequently, this result has a significant value to the second question of this study where it also meets the researcher's assumption to this question.

Therefore, this statement is one of the answers to the second question of this study.

Table (4.19) Pragmatic discourse markers (which do not contribute to the lexical content of the sentence) enhance EFL students' listening comprehension of the lecture.

| Value	Frequencies	Percentage %
Strongly agree	11	24.4%
Agree	26	57.8%
Neutral	5	11.1%
Disagree	3	6.7%
Strongly disagree	0	0.0%
Total	45	100.0%
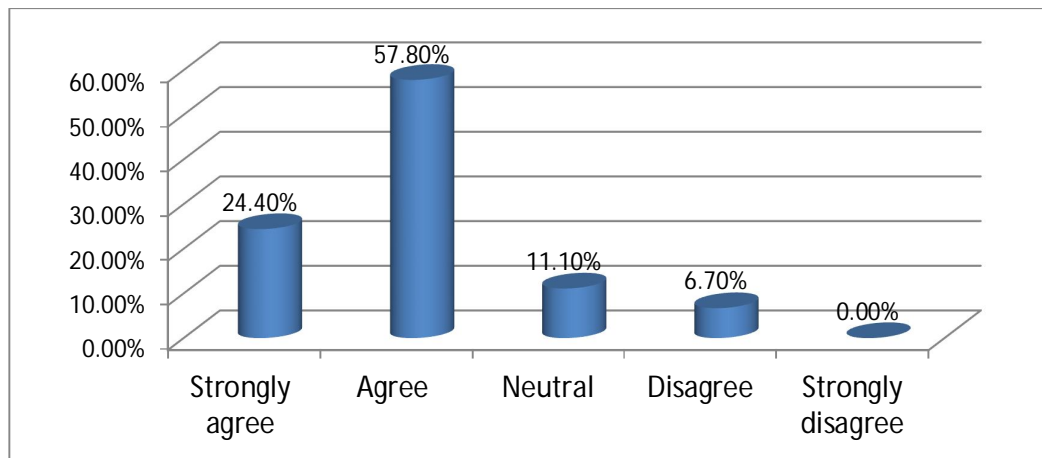
The results in the above table (4.19) illustrates that the respondents' views of the statement ;(Pragmatic discourse markers enhance EFL students' listening comprehension of the lecture) are (24.4%) strongly agreed, (57.8%) agreed, neutral by (11.1%), (6.7%) disagreed, and (0.0%) are strongly disagreed. Generally, this result indicates that, the respondents have agreed positively on the above statement. Therefore, this has revealed that the

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pragmatic use of DMs help students in understanding spoken text in different situations.

Table (4.20) Semantic discourse markers (that do not affect the truth conditions of an utterance) have little effect in enhancing EFL students' listening comprehension of the lectures.

Value	Frequencies	Percentage %
Strongly agree	4	8.9%
Agree	26	57.8%
Neutral	5	11.1%
Disagree	8	17.8%
Strongly disagree	2	4.4%
Total	45	100.0%
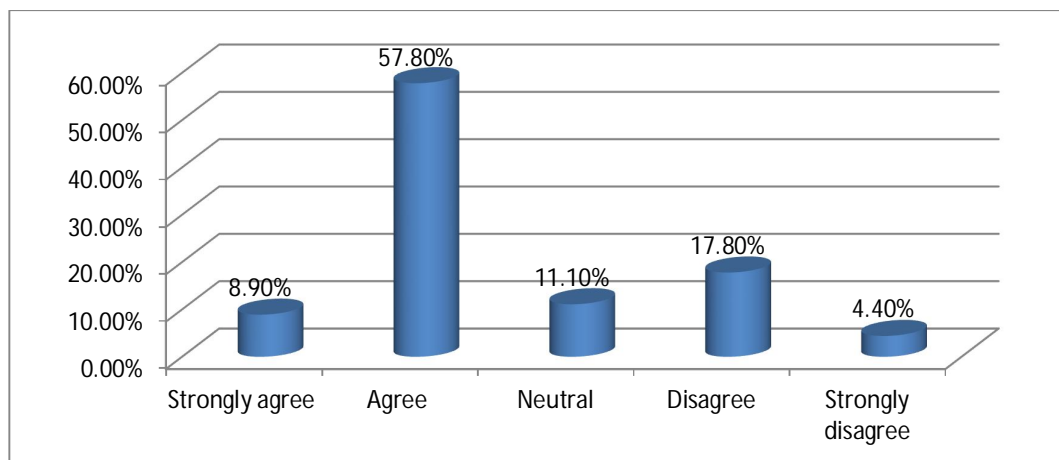
The table (4.20) shows teachers' views on above statement;(semantic discourse markers has little effect on EFL students' enhancement of listening comprehension in academic lectures) by the strongly agree (8.9%) and agree by (57.8%) and neutral by (11.1%) and disagree by (17.8%) and strongly disagree by (4.4%). So, the great number of the respondents who agreed on the above statement had supported the second question to this study.

Meanwhile, the researcher claimed that, the macro and micro discourse affect the enhancement of EFL students' listening comprehension of the lectures. Therefore, this statement is accepted to support the specified hypothesis.

Table (4.21) EFL students can enhance their listening comprehension of the lecture if they are exposed to different functions of discourse markers.

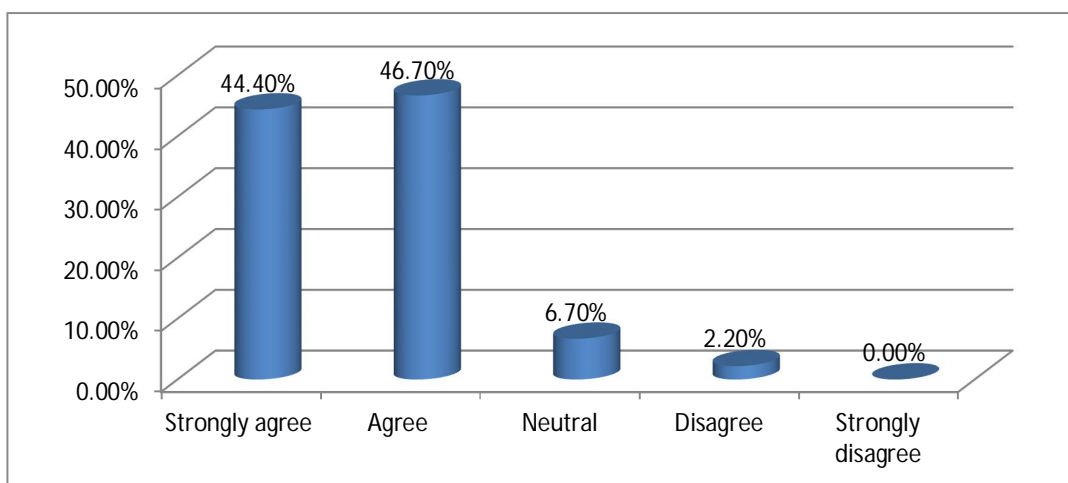| Value	Frequencies	Percentage %
Strongly agree	20	44.4%
Agree	21	46.7%
Neutral	3	6.7%
Disagree	1	2.2%
Strongly disagree	0	0.0%
Total	45	100.0%

Table (4.21) illustrates the views of the respondents of the statement; (EFL students can enhance their listening comprehension of the lecture if they are exposed to different functions of discourse markers) by the strongly agree (44.4%) and agree by (46.7%) and neutral by (6.7%) and disagree by (2.2%) and strongly disagree by (0.0%). However, the researcher claims that, the textual function is an enabling function and essential for cohesive texts and effectively conveying ideational and interpersonal meanings of the listener.

Therefore, EFL students expose to different DMs functions it enhances their listening comprehension. Moreover, this claim is supported by the concept of Halliday and Hasan's Approach of cohesive devices. Furthermore, the majority of respondents to this statement sample agreed on the assumption that EFL students enhance their listening comprehension when they get exposed to different functions of DMs.

Table (4.22) chi-square test results of the respondents answering the second fives statements of the questionnaire

No	Statements	Chi-square value	Df	Sig	Median	Interpretation
1	EFL students can comprehend lectures when micro discourse markers such as; *so , and , because... etc* are used	27.089	3	0.000	4.00	Agree
2	EFL students can comprehend lectures when the macro discourse markers (*okay ,you know, I mean..* etc are used.	30.444	4	0.000	4.00	Agree
3	Pragmatic discourse markers (which do not contribute to the lexical content of sentences) help EFL students understand the lectures.	28.867	3	0.000	4.00	Agree
4	Semantically, discourse markers Do not affect the truth conditions of an utterance therefore, they do not enhance EFL students' listening comprehension of the lecture.	42.222	4	0.000	4.00	Agree
5	EFL students can enhance their Listening comprehension of the Lecture if they are exposed to different categories of discourse markers.	30.644	3	0.000	4.00	Agree

4.6.6 The results of the above table (4.22) Interpreted as follows:

1. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement; EFL students can comprehend lectures when micro discourse markers such as; *so, and, because…etc.* are used was (27.089) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

2. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement; EFL students can comprehend the lecture when the macro discourse markers (okay*, you know, I mean* ... etc.) are used was (30.444) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically

3. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement; Pragmatic discourse markers (which do not contribute to the lexical content of the sentence) enhance EFL students' listening comprehension of the lecture was (28.867) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

4. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement Semantically, discourse markers seem not to affect the truth conditions of an utterance therefore, they do not enhance EFL students' listening comprehension was (42.222) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

5. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement; EFL students can enhance their listening comprehension of the lecture if they are exposed to different categories of discourse markers was (30.644) with P-value (0.000) which is lower than the level of significant value (5%) .

4.6.7 Results and Discussion of the Second Question

According to the discussed-data of table (4.17) which indicated that (85.7%) of the participants agree that, EFL students can comprehend lectures better through the use of micro discourse markers. And also, the data of table (4.18), indicated that (77.8%) of the respondents strongly agree that, EFL students can comprehend lectures better through the use of macro discourse markers. Where in table (4.19) which reflected that (82.2%) of the respondents agree on that Pragmatic discourse markers enhance EFL students' listening comprehension of the lecture. And in table (4.20) which indicated that (66.7%) of the participants agree that, semantic discourse markers do not to affect the truth conditions of an utterance therefore, they do not enhance EFL students' listening comprehension. in addition to table (4.21) that reflected that (91.1%) of the participants agree on that, EFL students can enhance their listening comprehension of the lecture if they are exposed to different categories of discourse markers. Accordingly, the answer of question two has a statistical significant value.

4.6.8 Verification of the Second Hypothesis

To verify this hypothesis, the questionnaire's answers are statistically analyzed and discussed for adherence to significant statistical differences among the respondents' views. Accordingly, the results of the statistical analysis, as depicted above in table (4.22) signify value of (0.000) and a median of (04) this indicates that teachers' response has revealed statistical differences. Therefore, the hypothesis that stated as; the macro and micro discourse markers categories are the most affecting types that enhance EFL students' listening comprehension, in the treatment programme is confirmed to be true.

4.6.9 Questions Three

- Would there be a significant statistical difference between the pre-test and post-test scores suggesting that the treatment programme of discourse markers can benefit EFL students' listening comprehension of academic lectures?

Table (4.23) when teachers raise EFL students' awareness of discourse markers it improves their listening comprehending the lecture.

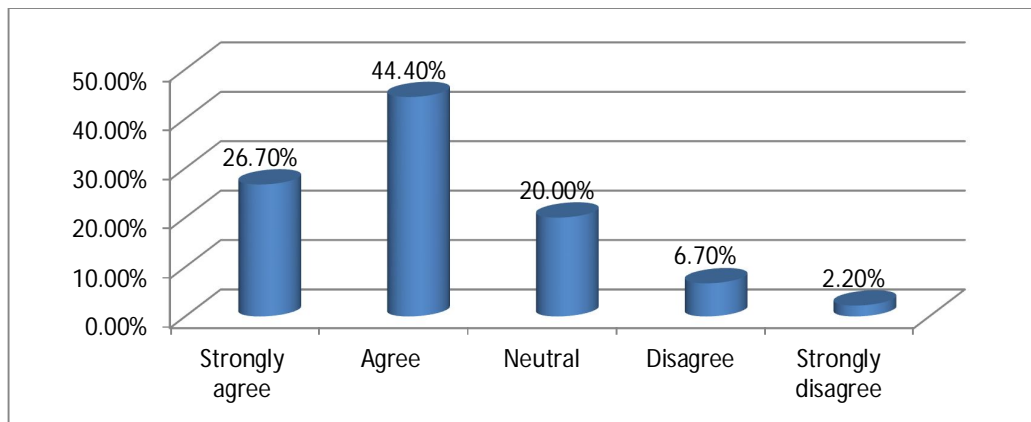| Value	Frequencies	Percentage %
Strongly agree	12	26.7%
Agree	20	44.4%
Neutral	9	20.0%
Disagree	3	6.7%
Strongly disagree	1	2.2%
Total	45	100.0%

Table (4.23) illustrates the views of the respondents of the statement (When teachers raise EFL students' awareness of discourse markers it improves their listening comprehending the lecture.) by strongly agree (26.7%), agree by (44.4%), neutral by (20.0%), disagree by (6.7%), and strongly disagree by (2.2%). So, when the data of the raised statement was analyzed and considered through teachers 'views, it has reflected that, most of the respondents agreed with this statement which is valuable.

Table (4.24) Discourse markers should be taught to EFL students to enhance their listening comprehension of the lecture.

Value	Frequencies	Percentage %
Strongly agree	23	51.1%
Agree	20	44.4%
Neutral	1	2.2%
Disagree	1	2.2%
Strongly disagree	0	0.0%
Total	45	100.0%
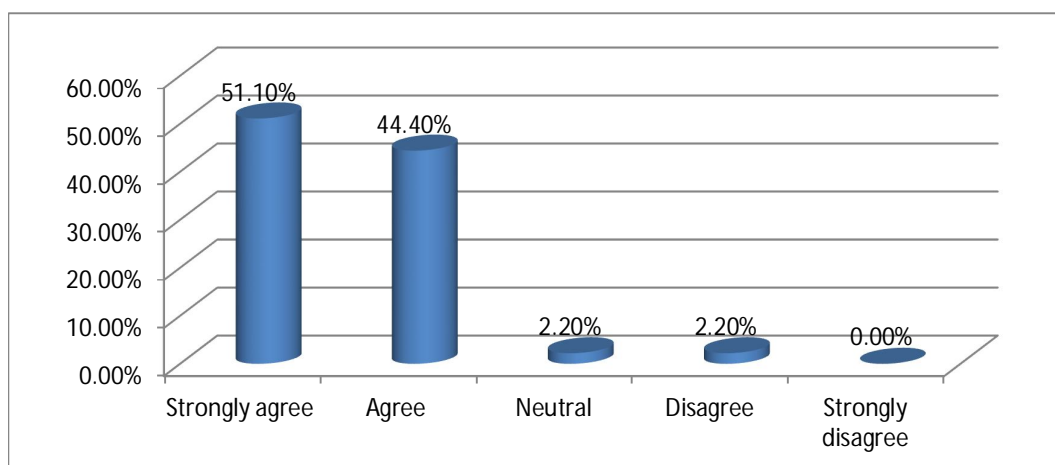
The results of the table (4.24) illustrate the qualitative data from the statement: (Discourse markers should be taught to EFL students to enhance their listening comprehension of the lectures) indicated that the respondents who were; strongly agreed (51.1%) and (44.4%) agreed and only (2.2%), neutral. Whereas, (2.2%) were disagreed and (0.0%) strongly disagreed. In general, the researcher firstly, claimed that teaching EFL students of discourse markers works as effective features in listening comprehension. Then, when the respondents' attitudes towards this sample were considered it reflected a significant value to this statement.

Table (4.25) Spontaneous use of discourse markers enhances listening comprehension of the lecture's contents.

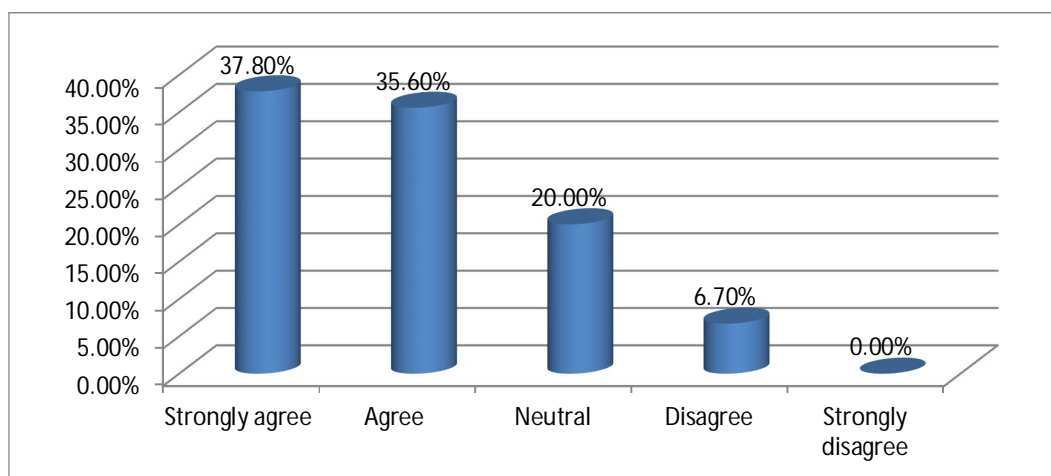| Value	Frequencies	Percentage %
Strongly agree	17	37.8%
Agree	16	35.6%
Neutral	9	20.0%
Disagree	3	6.7%
Strongly disagree	0	0.0%
Total	45	100.0%

Table (4.25) illustrates the views of the respondents of the above statement. Where, those who responded by strongly agree are (37.8%) and agree are (35.6%) whereas, those who responded by neutral are (20.0%) and disagree are (6.7%) and (0.0%) for strongly disagree. According to these results, the highest percentage which supports the above statement is (73.2%) which means the respondents generally agreed upon the idea which states that, using discourse markers spontaneously, enhance EFL listening comprehension. Therefore, reasonable use of discourse markers does not

affect negatively the contents of the lecture subject reasonably; it enhances the comprehension of the subject.

Table (4.26) Discourse markers should be taught to EFL students at earlier stages in their study to support their listening comprehension.

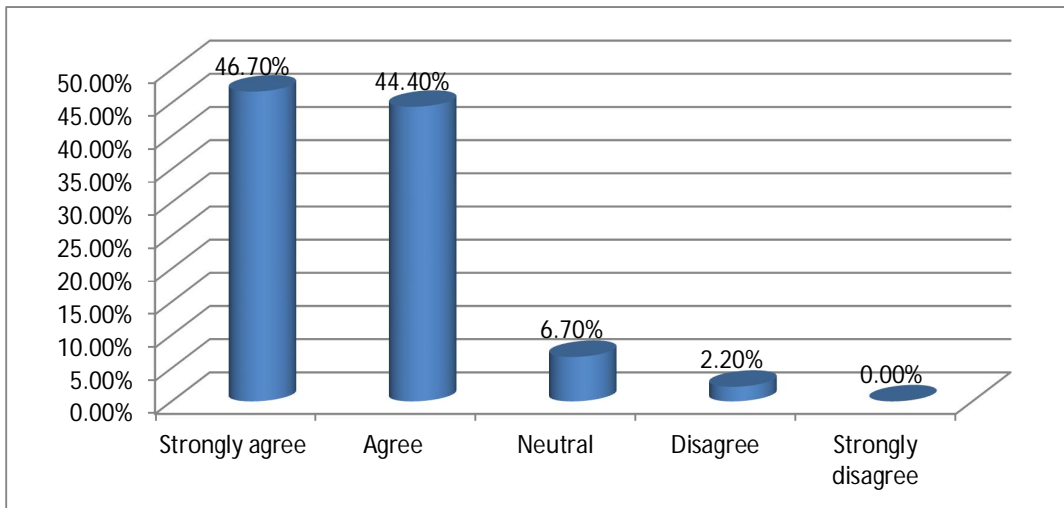| Value	Frequencies	Percentage %
Strongly agree	21	46.7%
Agree	20	44.4%
Neutral	3	6.7%
Disagree	1	2.2%
Strongly disagree	0	0.0%
Total	45	100.0%

Table (4.26) reflects teachers' attitudes towards the statement; teaching EFL students discourse markers at earlier stages to support their listening comprehension of the discourse. These results display that, the respondents are strongly agreed on teaching discourse markers to EFL students at earlier stages. Whereas, the respondents who have no idea about this statement was (6.7%) and disagree was (2.2%) and those who strongly disagree by (0.0%). Accordingly, these are significant results.

Table (4.27) Teachers should encourage EFL students to use Discourse Markers.

Value	Frequencies	Percentage %
Strongly agree	14	31.1%
Agree	29	64.4%
Neutral	1	2.2%
Disagree	1	2.2%
Strongly disagree	0	0.0%
Total	45	100.0%
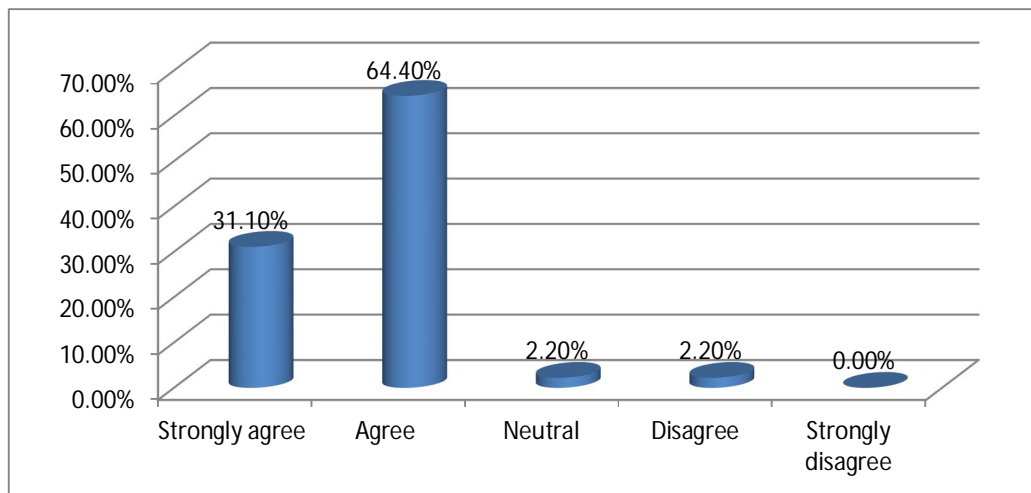
The information which were derived from the above statement (Teachers should encourage EFL students to use Discourse Markers) has indicated that, (31.1%) of respondents strongly agreed on the above statement which reflects that EFL need to be encourage of using discourse markers that help them in understanding discourse. And also there were (64.4%) of respondents agreed on the above statement whereas, the respondents can be detailed as neutral (2.20%) and disagree (2.20%). Therefore, these results have a significant value.

Table (4.28) chi-square test results of the respondents answering the third five statements of the questionnaire

No	Phrases	Chi-square value	Df	Sig	Median	Interpretation
1	Raising EFL students' awareness discourse markers improves their listening comprehending of the lecture.	25.556	4	0.000	4.00	Agree
2	Discourse markers should be taught to EFL students to enhance their listening comprehension of the lectures.	37.756	3	0.000	5.00	strongly agree
3	Spontaneous use of discourse markers enhances listening comprehension of the lectures.	11.444	3	0.000	4.00	Agree
	Discourse markers should be taught to EFL students at earlier stages in their study to support their listening comprehension.	30.644	3	0.000	4.00	Agree
5	Lecturers should encourage EFL students to use Discourse Markers.	47.356	3	0.000	4.00	Agree

4.6.10 The results of table (4.28) Interpreted as follows:

1. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement; "Raising EFL students' awareness of discourse markers improves their listening comprehending the lecture" was (25.556) with P-value (0.000) which is lower than the level of

significant value (5%) These refer to the existence of differences statistically.

2. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement; Discourse markers should be taught EFL students to enhance their listening comprehension of the lecture was (37.756) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

3. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement; Spontaneous use of discourse markers enhances listening comprehension of the lecture's contents was(11.444) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

4. The value of chi – square calculated to signify the differences between the numbers of individuals of the study for the statement " Discourse markers should be taught to EFL students at earlier stages in their study to support their listening comprehension was (30.644) with P-value (0.000) which is lower than the level of significant value (5%). These refer to the existence of differences statistically.

5. The value of chi – square calculated to signify the differences between the of Individuals of the study for the statement should encourage EFL students to use Discourse Markers was (47.356) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

4.6.11 Results and Discussion of the Third Question

According to the discussed-data of table (4.21) which indicated that (71.1%) of the participants agree that, Raising EFL students' awareness of discourse markers improves their listening comprehending the lecture. And also, the data of table (4.22), indicated that (95.5%) of the respondents strongly agree that, EFL students should be taught the discourse markers. So, this high significant value makes the researcher strongly believe on teaching DMs to EFL students should be considered among university teachers. Consequently, this makes students structure the contents of the discourse and enhance their listening comprehension. Furthermore, EFL students could use these discourse markers in their speech. Where in table (4.23) which reflected that (73.4%) of the respondents agree on that, Spontaneous use of discourse markers enhances listening comprehension of the lecture. And in table (4.24)which indicated that (91.1%) of the participants agree that, Discourse markers should be taught to EFL students at earlier stages. in addition to table (4.25) that reflected that (95.5%) of the participants agree on that, EFL students should encourage EFL students to use Discourse Markers. Accordingly, the answer of question two has a high statistical significant value.

4.6.12 Verification of the Third Hypothesis

To verify this hypothesis, the questionnaire's answers are statistically analyzed and discussed for adherence to significant statistical differences among the respondents' views. Accordingly, the results of the statistical analysis, as depicted above in table (4.26) signify value (0.000) and median of (04) this indicates that teachers' response revealed statistical differences. Therefore, the hypothesis that stated as; there would be a significant statistical difference in the pre- and post-test scores suggesting that the treatment Programme benefitted EFL students' listening comprehension of academic lectures is successfully tested and confirmed true.

4.7 Overgeneralizing the Study Results and Discussions in Terms of the Hypotheses of the Test and the questionnaire

This section aims at displaying the results of the Test and the Questionnaire as the two main tools for data collection of this study. These data were analyzed statistically through SPSS Programme. Therefore, this section focuses mainly on discussing the results of the test and the questionnaire with accordance to the hypotheses of this study.

4.7.1 The First Hypothesis

A. (EFL students can enhance their listening comprehension in academic lectures if they are made aware of the effective role of discourse markers.)

According to the pre-test analysis of the students' groups which reflects the data of the first hypothesis as shown in table (4.3).However, the t. test result shows the median of the test participants for the experimental group is (54.22) whereas; the control group is (51.42). Then, after analyzing the pre-test the total marks scored by the participants and compared the mean scores to see the significant differences between students' results of the pre-test and their awareness of discourse markers as they occur in the lecture text. Consequently, it showed no significant differences could be associated with the awareness of discourse markers. In addition, the questionnaire analysis of the respondents of teachers which includes five statements stated in the first hypothesis to support the above results of the pretest. Nevertheless, the related questionnaire's statements of the first hypothesis have calculated statically and showed that, most of the questionnaire's respondents strongly agreed on the values of discourse markers in enhancing EFL students listening comprehension of the lecture. Additionally, they are mostly agreed on the fact that EFL students are not aware of the effective role of discourse markers in enhancing listening comprehension of the lecture. Furthermore, the study of Ameer (2008) in the previous study has signified that foreign language students' (FLL) level of lecture comprehension in English medium

is relatively low due to the unconscious of discourse markers effectiveness in the lectures.

Therefore, the verification of this hypothesis, according to the results of the statistical analysis, as depicted above indicate that EFL students' awareness of discourse markers enhance their listing comprehension of the lecture. Therefore, this hypothesis is successfully tested through the test and the questionnaire and confirmed true.

4.7.2 The Second Hypothesis

B. (*The micro and macro discourse markers categories are the most affecting types that enhance EFL students' listening comprehension of academic lectures.*)

When the data of the test (post-test) of the experimental group was analyzed it reflected a significant difference for the post-test of that group as shown in table (4.14) Moreover, the T/test mean of the experimental group in the pretest is (54.22) whereas, the T/test mean of the same group in the posttest is (69.80) as shown in table (4.7). This significant difference was due to the treatment Programme of the experimental group in the role of discourse markers in enhancing listening comprehension of the lectures. Noticeably, the experimental group has subjected to the treatment program which extended up to 45 days where students received Programme of teaching, videos, and exercises on the effectiveness of discourse markers in lectures particularly, teaching of macro, micro, semantic and pragmatic DMs. In addition to the test results also, the questionnaire analysis of the respondents of teachers which includes five statements stated the second question of the study. However, after analyzing the total marks scored by the respondents of the questionnaire and compared the mean scores in order to determine whether there existed significant difference resulted from teachers' attitudes towards what are most effective categories of DMs that mostly affected EFL students listening comprehension of lectures. It showed there

was significant differences were associated with the categories of macro and micro discourse markers. Furthermore, to support the above results of the posttest and the questionnaire, there was a study carried out by Chaudron and Richards, (1986).*(See the previous study).* They found a consistent result across the groups listening to the lectures that macro-markers, which are the "higher order markers signaling major transitions and emphasis in the lectures" were more conducive to recall than micro-markers.

Based on all these results, this study has displayed that the macro and micro discourse markers categories are the most affecting types that enhance EFL students' listening comprehension of academic lectures. As a result, the confirmation of this hypothesis is confirmed and validated by the two tools of this study.

4.7.3 The Third Hypothesis

C. *(There would be a significant statistical difference in the pre- and post-test scores suggesting that the treatment programme of discourse markers has benefitted EFL students' listening comprehension of academic lectures.)*

The results of the post-test of the experimental group indicated that the treatment programme for the experimental group has a significant value (0.000) with M = (69.80). In contrary, the post-test of the control group has no significant value which represents M= (54.22) which are lower the posttest result. For the reason is that, this group of respondents was not exposed to a treatment Programme on DMs. Nevertheless, since the construction of both the sample groups was very similar and their performances in the pre-test and gave similar scores, the fact that there was enhancement in the posttest scores of only the experimental group. This could not be described as maturation. Maturation refers to changes such as physical growth and mastering developmental skills which may affect experimental results that occur over time within subjects (Collins, 1999:911). The improvement in the post-test scores could rather be described as motivational factors such as attending the

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treatment programme regularly. Therefore, within a short period of time students seemed to have benefited from the intervention programme directed at improving their listening comprehension through DMs at tertiary level. That was why the experimental group showed consistent differences in the two the tests (pre-posttests) as shown in table (4. 16). So, this result could be supported by the results that were derived from the questionnaire analysis of the teachers which includes five statements stated the third hypothesis. However, after analyzing the total marks scored by the participants of the questionnaire and compared the mean scores in order to determine whether there were significant statistical difference resulted from teachers' attitudes towards teaching EFL students the role of discourse markers in enhancing listening comprehension of the lecture. It showed a significant value of (0.000) associated with the experimental group due their exposures of the significant role of discourse markers in listening comprehension.

Therefore, the verification of this hypothesis, according to the results of the statistical analysis, as depicted above indicate that, there would be a significant statistical difference between the pre- and post-test scores suggesting that the treatment Programme benefitted EFL students' listening comprehension of academic lectures. In addition, the significant results of teachers attitudes towards this hypothesis. Therefore, this research hypothesis successfully tested and verified via the test and the questionnaire.

4.8 Summary of the Chapter

This chapter has reflected the data analysis, results, and discussion of this study. Firstly, the chapter has explained the data of the test and how was statistically analyzed and discussed. Secondly, it has explained the data of the questionnaire and how was statistically analyzed and discussed. Then, finally, it has shown over- generalizing results of both the test and the questionnaire, with adherence to the verifications of the study hypotheses.