

## **4. RESULTS AND DISCUSSIONS**

### **4.1. Synopsis:**

501 paramedical students were the research sample for this research. Test Anxiety Inventory (TAI) consists of 90 questions in the proforma with 4 as a maximum score for each question. The higher the score, the higher the anxiety level. The total maximum score, therefore, was 360. The Score was categorized into Severe ( $\geq 200$  scores), Moderate (between 101-199 score), and Mild ( $\leq 100$  scores) from the observed data after it was collected, as there was a lack of reference for a similar study in the same field for the classification of the categories. All the 105 students in the Severe category were then randomly assigned into these 3 groups – Neurolinguistic Programming group, Hypnotherapy group, and Control Group (35 students in each group). All the 105 students were followed-up after a month of intervention to access the effect of intervention – whether sustained or not.

### **4.2. Descriptive Statistical Analysis:**

Descriptive Statistical Analysis was conducted on their demographic variables like Gender, Age, Birth Order, Religion, Education of Father and Mother, Occupation of Father and Mother, the average score of previous exams, the score of the last exam, and score-categories (Mild, Moderate, and Severe).

### **4.3. Chi-square Test**

A Chi-square test was run to check if there was any association between scores and the demographic variables.

### **4.4. Mann-Whitney U Test**

To compare score-categories between two independent groups (1. Neurolinguistic Programming Group - Group B & Control Group - Group C, 2. Hypnotherapy Group - Group A & Control Group - Group C), Mann-Whitney U test was conducted.

## 4.5. Wilcoxon Test

To compare within a paired group (in both Neurolinguistic Programming and Hypnotherapy), a Wilcoxon test was conducted. The test was conducted to see whether there was a significant difference in score-categories of pre-test data & post-test data, and similarly in post-test data & follow-up test data.

## 4.6. Statistical Analysis:

### 4.6.1. Descriptive Statistical Analysis:

*Table 4.1* Descriptive Statistical Analysis

Components	No. of Students	Minimum	Maximum	Mean	Std. Deviation
Age of the student	501	17	21	18.49	0.954
Average Score in the previous exams (%)	501	36.00	90.00	69.76	9.11
Score in the last exam (%)	501	20.00	95.00	64.37	12.27

The above table shows the descriptive statistics of the three variables mentioned in the table. Mean and SD of the Age of the students participated was found to be  $18.5 \pm 0.95$  giving a smaller range as the lowest age was of 17 years and the highest age of 21 years. The range of scores was found to be more in the score of the last exam with SD=12.27 compared to the average score of the previous exams with SD=9.11. However, the mean of the average score of previous exams (69.76) was more than the score of the last exam (64.37).

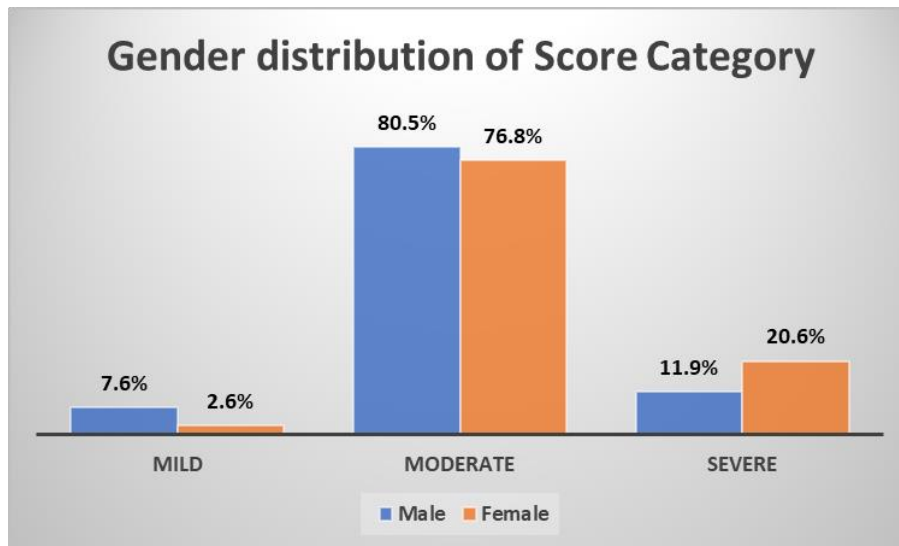
#### 4.6.2. Statistical Analysis of Gender:

*Table 4.2 Statistical Analysis of Gender*

<b>Gender</b>	<b>Mild</b>	<b>Moderate</b>	<b>Severe</b>	<b>Total</b>
<b>Male</b>	9	95	14	118
<b>Female</b>	10	294	79	383
<b>Total</b>	19	389	93	501

The score-category (mild, moderate, severe) showed a significant association with Gender (male, female) of the student as the Chi-square test gave the p-value = 0.007 at a 5% level of significance. In the study, out of 501 students, about 76% (n=383) were female students while the remaining 24% (n=118) were male students. About 81% of males and 77% of females were in the Moderate category and so the maximum students in both genders were found to be in the Moderate category. About 12% of males and 21% of females were in a Severe category. Only about 8% of males and 3% of females were in the Mild category. When the total number irrespective of the gender was considered, the proportion of Mild, Moderate, and Severe categories was 3.8%, 77.6%, and 18.6% respectively.

#### 4.6.2.1. Gender Distribution of Score Category:



*Figure 4.1. Gender Distribution of Score Category*

From the chart above we can understand that both in Male and Female gender, the maximum proportion of participants were in the Moderate score category (i.e. 80.5% and 76.8% respectively). We can also observe that the Severe category had more proportion of female participants. (i.e. 20.6% compared to 11.9% in males) whereas in Mild and Moderate categories, the proportion of Male is more than that of females.

#### 4.6.3. Education of Father and Mother:

*Table 4.3. Statistical Analysis of Paramedical Students Parent's Education*

<b>Education of Father</b>				
<b>Education</b>	<b>Mild</b>	<b>Moderate</b>	<b>Severe</b>	<b>Total</b>
<b>Primary</b>	1	15	0	16
<b>10<sup>th</sup></b>	2	32	22	56
<b>12<sup>th</sup></b>	5	46	10	61
<b>Diploma</b>	1	17	10	28
<b>Graduate</b>	7	241	45	293
<b>Postgraduate</b>	3	38	6	47
<b>Total</b>	19	389	93	501
<b>Education of Mother</b>				
<b>Education</b>	<b>Mild</b>	<b>Moderate</b>	<b>Severe</b>	<b>Total</b>
<b>Primary</b>	1	29	8	36
<b>10<sup>th</sup></b>	4	45	27	76
<b>12<sup>th</sup></b>	6	77	17	100
<b>Diploma</b>	1	11	4	16
<b>Graduate</b>	6	193	35	234
<b>Postgraduate</b>	1	34	2	37
<b>Total</b>	19	389	93	501

The score-category (mild, moderate, severe) showed significant association with the Education of the Father (p-value < 0.001) and Education of the Mother (p-value = 0.006) of the student. It was seen that the more the education of the father and the mother, the more was the increase in the score in their children. The majority of the parents were Graduates in the sample – about 59% (n=293) of fathers and about 47% (n=234) of mothers.

#### 4.6.3.1. Statistical Analysis of Anxiety vs. Father's Education:

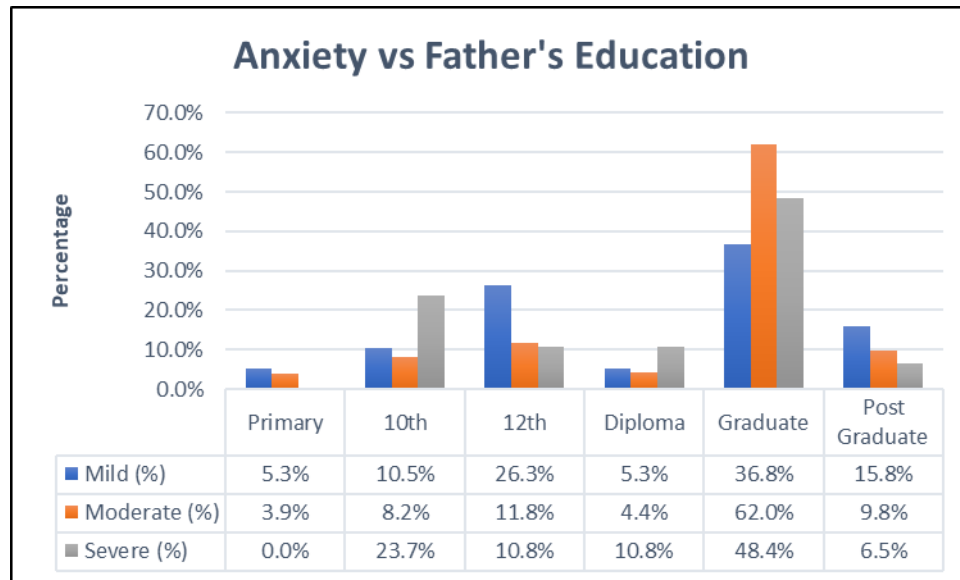


Figure 4.2. Statistical Analysis of Anxiety vs. Father's Education

The above graph shows that in all three anxiety score categories of Mild, Moderate, and Severe; it was the proportion of the graduate fathers the most - the maximum being in the Moderate category (i.e. of the total in moderate, 62% were graduates). The above graph shows the proportion in terms of the anxiety score category.

Greco and Morris (2002) discovered that fathers' education was affecting social anxiety, and learners exhibited more regulating behavior during task performance.

#### 4.6.3.2. Comparative Statistical Analysis of Anxiety vs Father's Education:

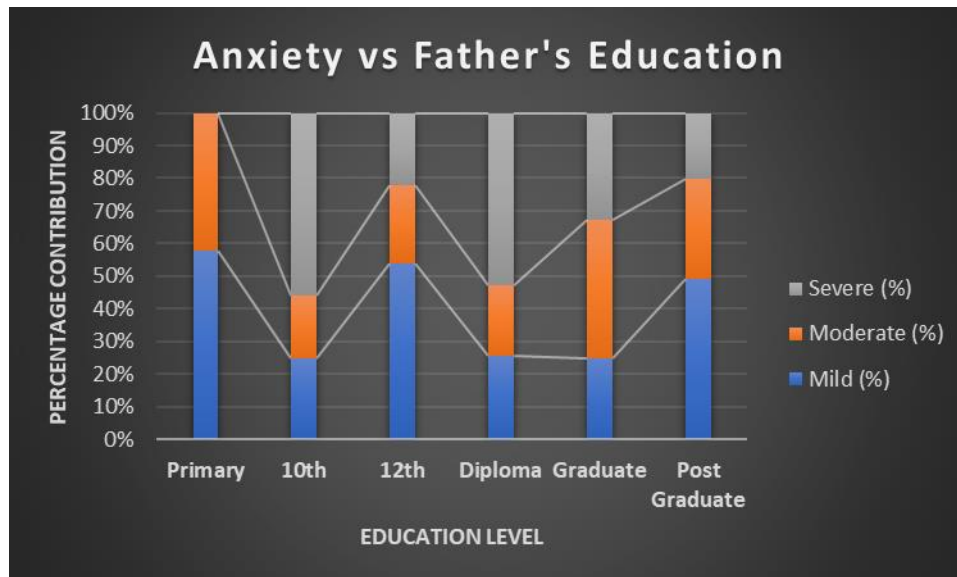


Figure 4.3. Comparative Statistical Analysis of Anxiety vs. Father's Education

The above graph depicts the proportion in terms of the education level of the Father of the student. It was observed that in the 10<sup>th</sup> Grade out of all the other levels of education, the Severe category has the maximum proportion and the next to it is Diploma whereas the maximum proportion of moderate score was observed among the Graduate and Primary education levels among the fathers. The proportion of the Mild category was almost equally found in Primary, 12<sup>th</sup> grade, and Postgraduate levels of education. Among the Primary level, only Mild and Moderate categories were observed. The Severe category level seems to decrease in proportion as the level of education increases.

#### 4.6.3.3. Statistical Analysis of Anxiety vs Mother's Education:

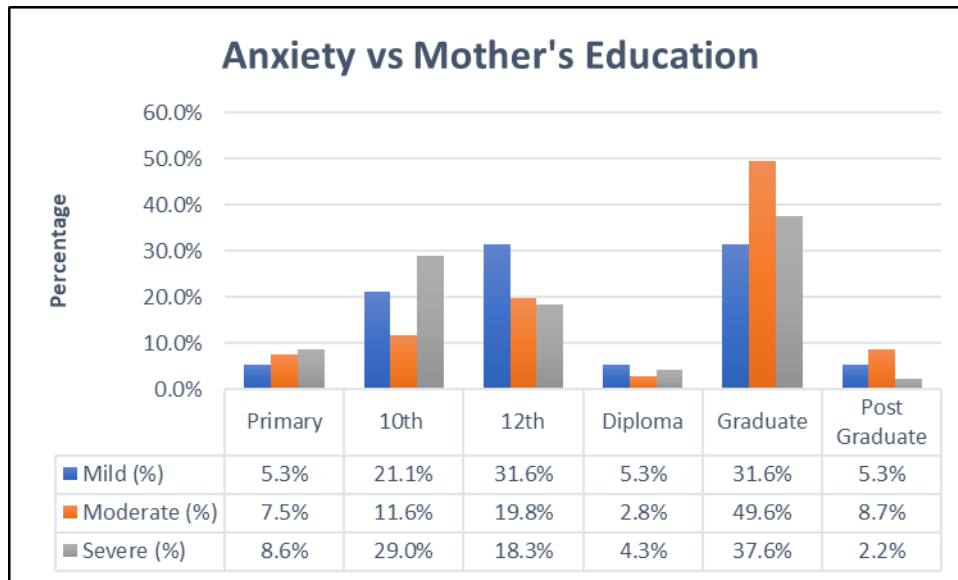


Figure 4.4. Statistical Analysis of Anxiety vs Mother's Education

The above graph showing the proportion of anxiety score category when compared with the education level of mothers is similar to that of the fathers in respect to Graduate level as it has the maximum mothers and again, the most being in the Moderate category (i.e. almost 50% of Moderate category students' mothers' education level is Graduate).

George Engelhard performed research on Mother education affecting Test Anxiety in education. **Bock and Moore (1986)** have claimed that the education of the mother has several benefits over additional signs in the home environment, such as the education of the father. The reason being the mother influences in discovering the linguistic abilities and academic ambitions of her children, the mother is more inclined to own administration of the kids in the state of single-parent houses, eventually, the child is further likely to know the education of the mother than the study of the father.



#### 4.6.3.4. Comparative Statistical Analysis of Anxiety vs Mother's Education:

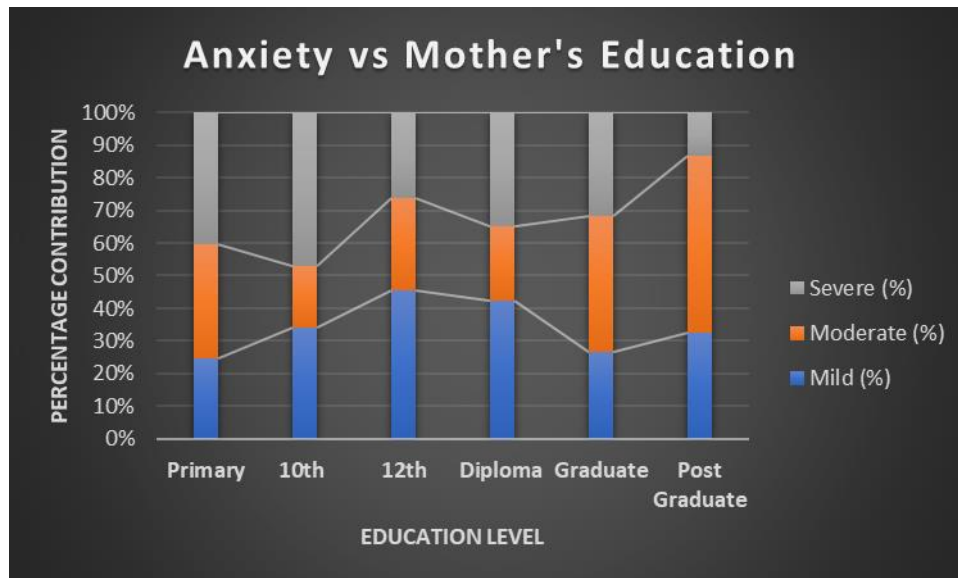


Figure 4.5. Comparative Statistical Analysis of Anxiety vs Mother's Education

From Educational levels, it was observed, the proportion of the moderate category is the most among Postgraduates. Similarly, the proportion of the Severe category is maximum in the 10<sup>th</sup> grade level of education of mothers. The Mild category has a maximum proportion among the 12<sup>th</sup> and Diploma level of Education of mothers. The Severe category level seems to decrease in proportion as the level of education increases.

The data insinuated by Bandura (1977) states that the math performance of daughters may be more reliant on the level of the education of mothers than the boy's performance, which does not resemble to be the case in the research sample. It may be explicable in terms of the cultural learning system, implying that the higher the level of the education of the mother, the more likely she is to admire, model, and augment academic activities for her daughter.

#### 4.7. Statistical Analysis of Occupation of Father:

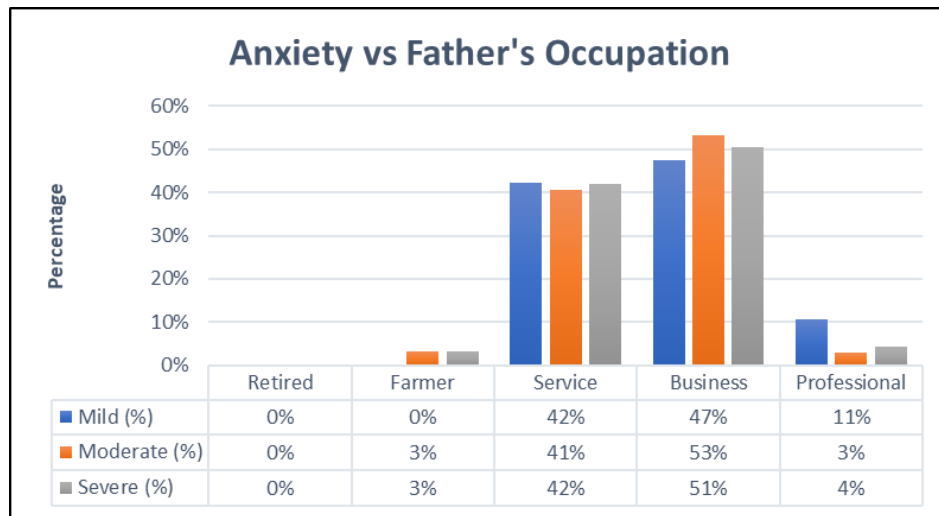
- The score-category (mild, moderate, severe) did not show a significant association with the Occupation of the Father (p-value = 0.803) and Occupation of the Mother (p-value = 0.123) of the student.

*Table 4.4. Statistical Analysis of Occupation of Father*

<b>Occupation of Father</b>				
<b>Occupation</b>	<b>Mild</b>	<b>Moderate</b>	<b>Severe</b>	<b>Total</b>
<b>Retired</b>	0	1	0	1
<b>Farmer</b>	0	12	3	15
<b>Service</b>	8	158	39	205
<b>Business</b>	9	207	47	263
<b>Professional</b>	2	11	4	17
<b>Total</b>	19	389	93	501
<b>Occupation of Mother</b>				
<b>Occupation</b>	<b>Mild</b>	<b>Moderate</b>	<b>Severe</b>	<b>Total</b>
<b>Home-maker</b>	16	335	82	433
<b>Farmer</b>	0	2	0	2
<b>Service</b>	1	44	11	56
<b>Business</b>	2	8	0	10
<b>Total</b>	19	389	93	501

From the above table, it was seen that 53% (n=263) of Fathers were having business as their occupation. About 41% (n=205) was in having Service as their occupation and among Mothers, the Occupation category that was the maximum was mothers who were Home-maker (about 86%, n=433).

#### 4.7.1. Statistical Analysis of Occupation of Father:

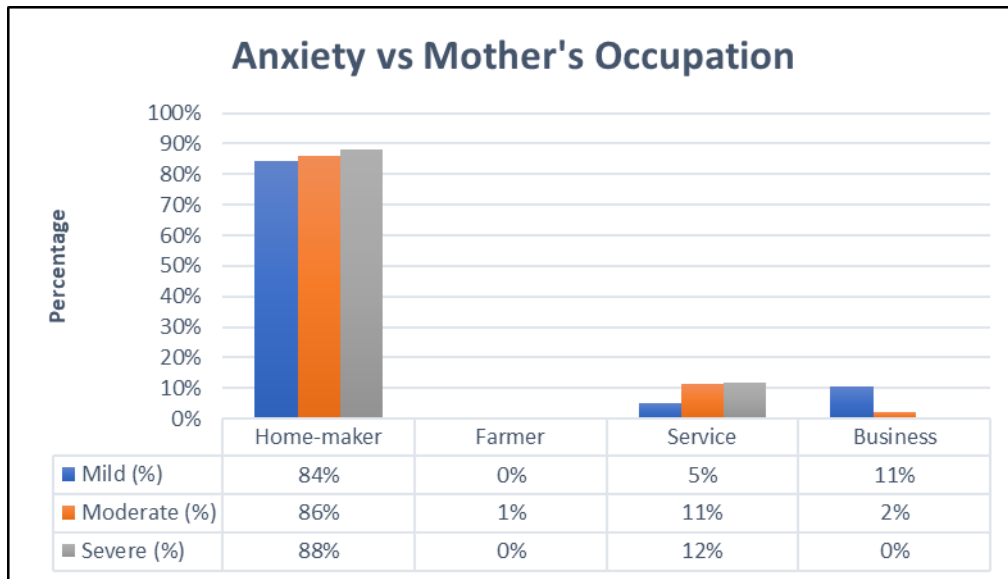


*Figure 4.6. Statistical Analysis of Occupation of Father*

The above graph shows the proportion of anxiety score categories among different occupation groups. As we can see, most fathers were in the occupation of Business and Service. The proportion of the anxiety score category did not differ too much in both these Occupation categories. Among professionals, the mild category had proportionally more numbers compared to Moderate and Severe.

PsycINFO Database Record © 2016 APA further identified Parent's profession explained 2% of the variation in Test Anxiety and self-esteem provided 10% in interpreting Test Anxiety. Based on the decisions, personal predilections render Test Anxiety among the students further than do their demographics.

#### 4.7.2. Statistical Analysis of Occupation of Mother:



*Figure 4.7. Statistical Analysis of Occupation of Mother*

From the graph, it is very evident that among mothers the occupation category Home-maker had the majority of numbers and again the anxiety score category did not differ significantly in this Occupation category. In the business category, the proportion of mild anxiety score was proportionally higher than other score categories.

PsycINFO Database Record © 2016 APA states similar findings. Data were collected utilizing questionnaires, personal interviews, and counseling sessions including the State Self-image order, the Test Anxiety Inventory, and terms for the stipulation of relevant sociodemographic erudition. The effects of a hierarchical various regression interpretation intimated that age and gender did not significantly provide to Test Anxiety.

#### 4.7.3. Statistical Analysis of Birth Order and Test Anxiety

Table 4.5. Statistical Analysis of Birth Order and Test Anxiety (row-wise)

Birth Order and Test Anxiety			Score Category			Total
			Mild	Moderate	Severe	
Birth Order	Only child	Count	4	51	29	84
		Birth Order %	4.80%	60.70%	34.50%	100.00%
	First child	Count	8	232	48	288
		Birth Order %	2.80%	80.60%	16.70%	100.00%
	Second child	Count	7	102	13	122
		Birth Order %	5.70%	83.60%	10.70%	100.00%
	Third child	Count	0	4	3	7
		Birth Order %	0.00%	57.10%	42.90%	100.00%
Total		Count	19	389	93	501
		Birth Order %	3.80%	77.60%	18.60%	100%

The above table gives the percentage concerning the Birth Order (row-wise). Out of 501 participants, 389 (77.6%) were in the Moderate Score category of test anxiety, and therefore, in every Birth Order category, the Moderate Score category is of the highest proportion. Not considering Third child Birth Order (as  $n = 7$ ) due to lack of enough samples, we can observe that the maximum proportion of Severe Score (34.5%) in Test Anxiety is in Only child Birth Order category.

Table 4.6. Statistical Analysis of Birth Order Score-Category and Test Anxiety(column-wise)

Birth Order Score-Category and Test Anxiety			Test Anxiety			Total	
			Mild	Moderate	Severe		
Birth Order	Only child	Count	4	51	29	84	
		Score Category %	21.1%	13.1%	31.2%	16.8%	
	First child	Count	8	232	48	288	
		Score Category %	42.1%	59.6%	51.6%	57.5%	
	Second child	Count	7	102	13	122	
		Score Category %	36.8%	26.2%	14.0%	24.4%	
	Third child	Count	0	4	3	7	
		Score Category%	0.0%	1.0%	3.2%	1.4%	
	Total		Count	19	389	93	501
			Score Category %	100.0%	100.0%	100.0 %	100.0%

The above table gives the percentage concerning Score-Category (column-wise). The first child Birth Order category had the maximum proportion (57.5%), followed by Second child (24.4%) and then the Only child (16.8%) out of the total 501 participants according to the research outcomes followed in both the Mild and Moderate Score categories of Test Anxiety, while in the Severe Score category, it is the first child (51.6%) which has a maximum proportion, Only child (31.2%), and then Second child (14.0%). **Chi-Square value = 25.246, P-value = 0.0003. Hence, there is a significant association between Birth Order and Test Anxiety.**

#### **4.8. Statistical Analysis of Chi-square Test: Score-category and demographic variables:**

A Chi-square Test was carried out between the score-category and the demographic variables. It showed whether there was any significant association between these variables. This test was carried out on the 501 students. Below is the table with a summary of those tests.

*Table 4.7. Statistical Analysis of Chi-square Test: Score-Category and Demographic Variables:*

<b>Variables</b>	<b>P-Value</b>	<b>Interpretation</b>
Score Category & Gender of the student	0.007	Highly associated
Score Category & Education of the Father	<0.001	Very Highly associated
Score Category & Education of the Mother	0.004	Highly associated
Score Category & Occupation of the Father	0.803	Not associated
Score Category & Occupation of the Mother	0.123	Not associated

**Group A: Hypnotherapy (n=35)**

**Group B: Neurolinguistic Programming (n=35)**

**Group C: Control Group (n=35)**

## **4.9. Statistical Analysis of Hypotheses:**

### **4.9.1. Comparative Analysis of Null Hypotheses of Paired group of Neurolinguistic Programming and Hypnotherapy:**

Below are the null hypotheses of the study:

To compare within a paired group (in both Neurolinguistic Programming and Hypnotherapy), a **Wilcoxon test** was conducted. The test was conducted to see whether there was a significant difference in score-category of pre-test data & post-test data, and similarly in post-test data & follow-up data.

15 Hypotheses have been clubbed into 5 groups consisting of 3 hypotheses in each group to have a clear understanding and interpretation of the proposed hypotheses.

### **4.9.2. Statistical Analysis of Hypotheses 1, 2, and 3:**

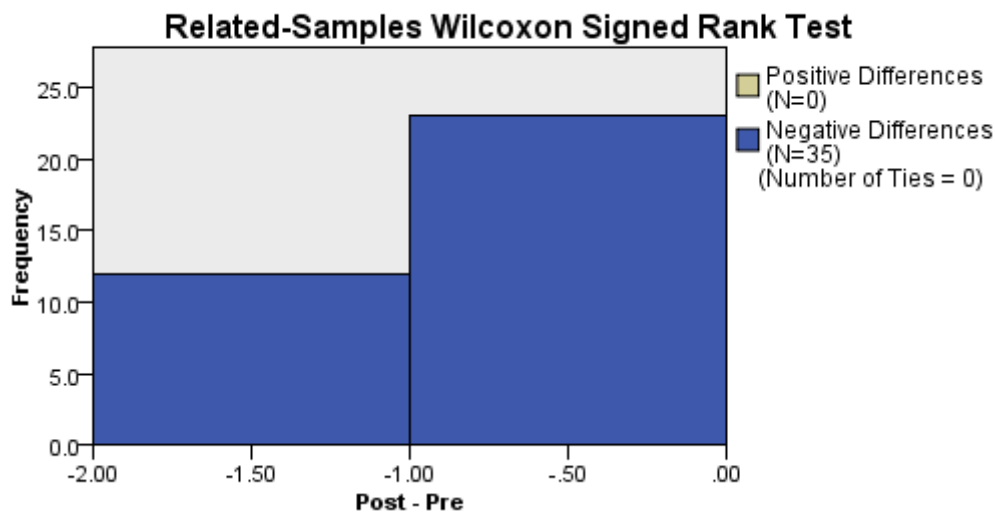
**1. Hypothesis 1:** In Group A, there is no significant difference in the pre-test scores and post-test scores.

**Hypothesis 2:** In Group A, there is no significant difference in the pre-test scores and follow-up test scores.

**Hypothesis 3:** In Group A, there is no significant difference in the post-test scores and follow-up test scores.



- **Statistical Analysis of Hypothesis 1**

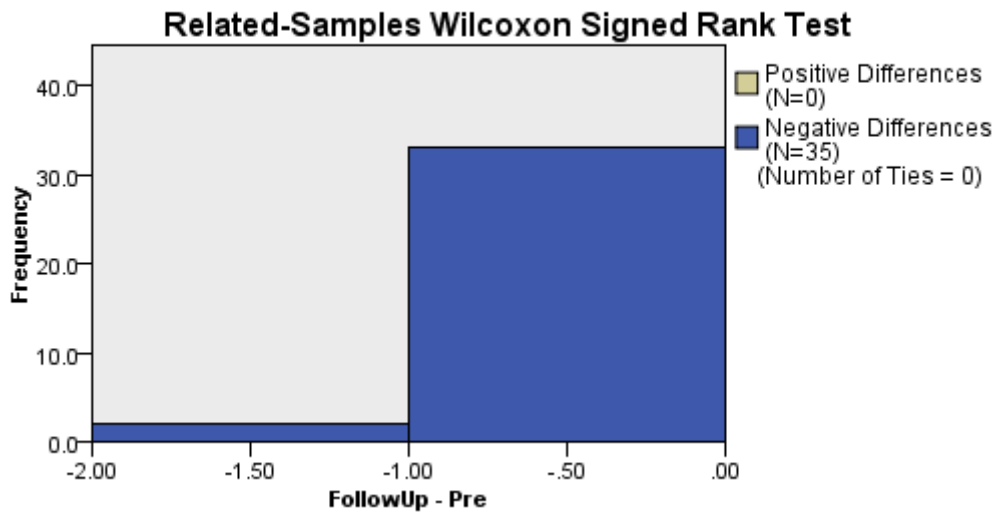


*Figure 4.8. Statistical Analysis of Hypothesis 1: Pre-test & Post-test Related Samples Wilcoxon Signed-Ranks Test*

As can be seen, in the above graph, all 35 students' score categories (mild=1, moderate=2, severe=3) are reduced in post-test-score categories when compared to pre-test score categories. The above graph shows the number of students whose score category has been reduced by 1 rank (n=23) and reduced by 2 ranks (n=12).

Related-Samples Wilcoxon Signed-Ranks Test gave  $P < 0.001$  and therefore, This **Hypothesis 1** is rejected and the researcher concludes that **there is a highly significant difference in the pre-test score categories and post-test score categories in the Hypnotherapy Group (Group A) and it is a desirable difference.** It means that all the subjects showed decreased anxiety levels after the Hypnotherapy sessions. The intervention did make a significant difference in the anxiety scores. **Sapp (1999)** researched the target group of Test Anxiety candidates, and he found similar statistical observations. The researcher observed that this hypothesis validates the analytical results.

- **Statistical Analysis of Hypothesis 2**



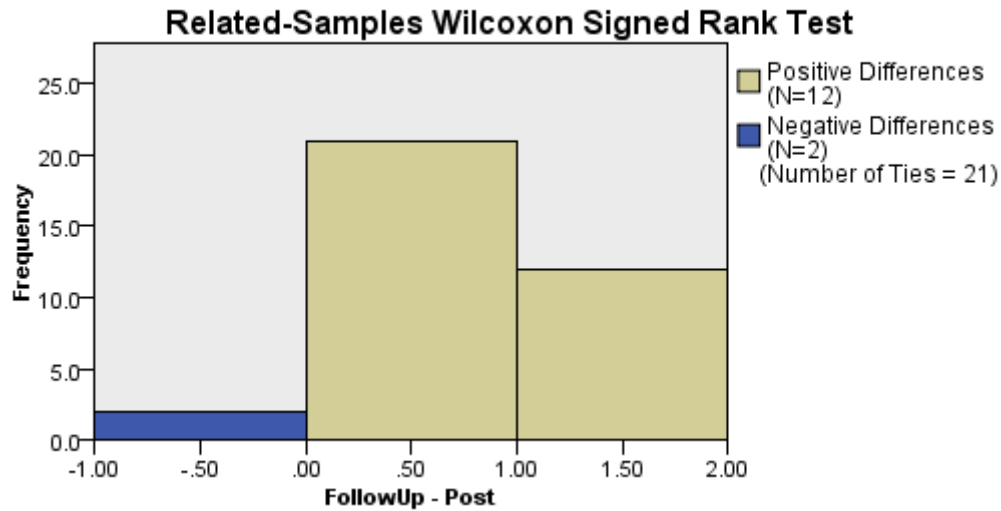
*Figure 4.9.* Statistical Analysis of Hypothesis 2: Pre-test & Follow-up of Related Samples Wilcoxon Signed-Ranks Test

As can be seen, in the above graph, all 35 students' score category is reduced in follow-up when compared to the pre-test. Most of the students have reduced the score category by 1 rank.

### **Related-Samples**

Wilcoxon Signed-Ranks Test gave  $P < 0.001$  and therefore, **Hypothesis 2** is rejected and concluded that **there is a highly significant difference in the pre-test score categories and follow-up score categories in the Hypnotherapy Group (Group A) and it is a desirable difference.** It means that intervention did help all 35 students as they had reduced score categories in follow-up when compared to the pre-test. Thus, exhibiting that hypnotherapy had a positive effect on the reduction of exam anxiety among students.

- **Statistical Analysis of Hypothesis 3**



*Figure 4.10.* Statistical Analysis of Hypothesis 3: Post-test & Follow-up of Related Samples Wilcoxon Signed-Ranks Test

As it can be seen, in the above graph, only 2 students' score category (in blue color) reduced in follow-up when compared to post-test score categories while 12 students' scores (bar on the right) increased in follow-up when compared to post-test scores and 21 students' score category (middle bar) had no change (tie).

Related-Samples Wilcoxon Signed-Ranks test gave **P=0.008** and therefore, **Hypothesis 3** is rejected and concluded that **there is a highly significant difference in the post-test score categories and follow-up score categories in the Hypnotherapy Group (Group A), however, the result is neither a desirable difference nor a positive difference.** It means that though there was a significant difference it was not desirable. Thus, it shows that hypnotherapy does not have a sustained effect on students in the reduction of exam anxiety as the anxiety increased among 12 students.

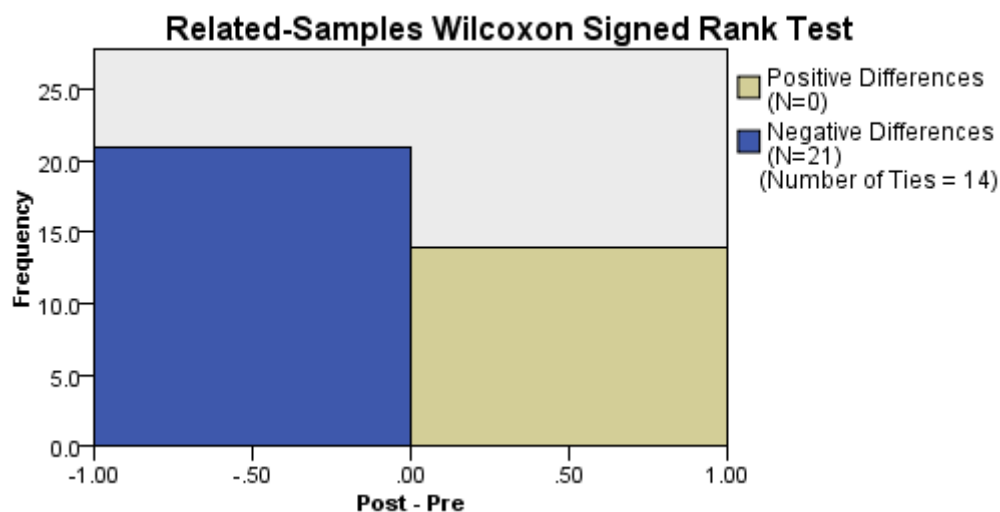
#### 4.9.3. Statistical Analysis of Hypotheses 4, 5, and 6:

2. **Hypothesis 4:** In Group B, there is no significant difference in the pre-test and post-test scores.

**Hypothesis 5:** In Group B, there is no significant difference in the pre-test score and follow-up test scores.

**Hypothesis 6:** In Group B, there is no significant difference in the post-test and follow-up exam scores.

- **Statistical Analysis of Hypothesis 4**

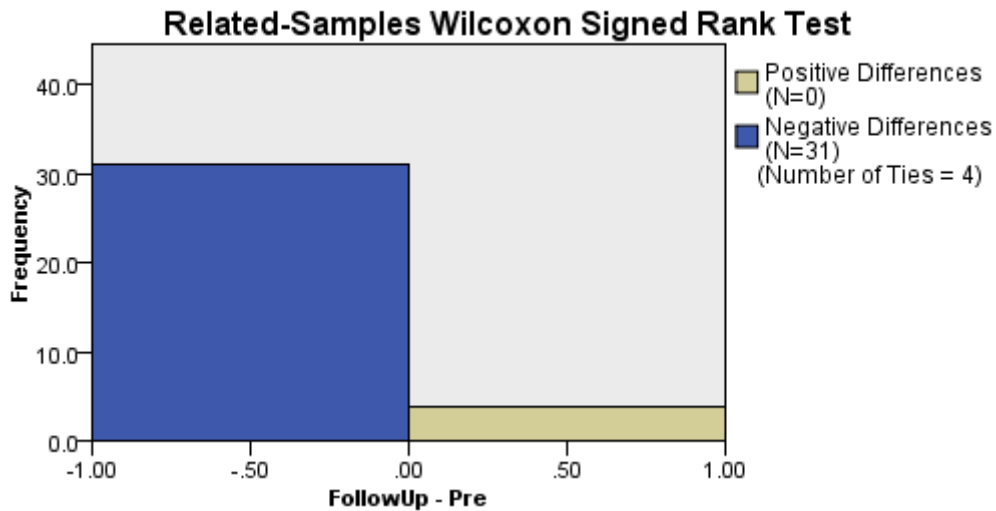


*Figure 4.11.* Statistical Analysis of Hypothesis 4: Pre-test & Post-test Related Sample of Wilcoxon Signed-Ranks Test

As can be seen, in the above graph, 21 students' score category was reduced in post-test score categories when compared to the pre-test score categories while 14 students' score categories had no change.

Related-Samples Wilcoxon Signed-Ranks test gave  $P < 0.001$  and therefore, **Hypothesis 4** is rejected and concluded that **there is a highly significant difference in the pre-test score categories and post-test score categories in the Neurolinguistic Programming Group (Group B) and it is a desirable difference.** It means that though not all had a positive effect of Neurolinguistic Programming, still a significant number of students had a reduction in anxiety due to the intervention in the Neurolinguistic Programming Group (Group B).

- Statistical Analysis of Hypothesis 5

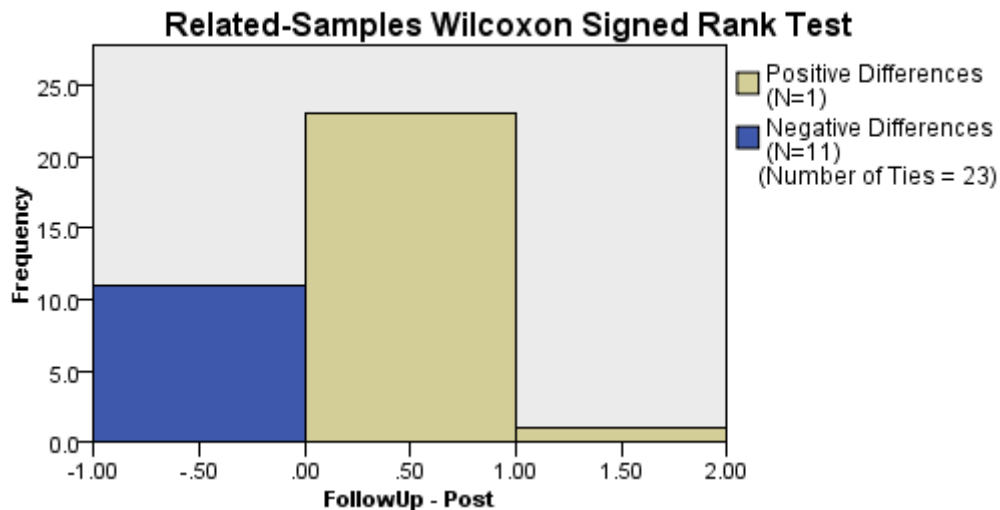


*Figure 4.12.* Statistical Analysis of Hypothesis 5: Follow-up & Pre-test Related Sample of Wilcoxon Signed-Ranks Test

As can be seen, in the above graph, 31 students' score category reduced in follow-up when compared to the pre-test score categories while 4 students' score categories did not change.

Related-Samples Wilcoxon Signed-Ranks Test gave  $P < 0.001$  and therefore, **Hypothesis 5** was rejected and concluded that **there is a highly significant difference in the pre-test score categories and follow-up score categories in the Neurolinguistic Programming Group (Group B) and it is a desirable difference.** It means that the positive effect of the intervention was still evident in almost all the students.

- Statistical Analysis of Hypothesis 6



*Figure 4. 13 Statistical Analysis of Hypothesis 6: Follow-up & Post-test Related Sample of Wilcoxon Signed-Ranks Test*

As can be seen, in the above graph, 11 students' score-category reduced in follow-up when compared to the post-test while only 1 student's score category increased in follow-up when compared to the post-test and 23 students score-category had no change at all.

Related-Samples Wilcoxon Signed-Ranks test gave  $P=0.004$  and therefore, **Hypothesis 6** is rejected and concluded that **there is a highly significant difference in the post-test scores and follow-up score categories in the Neurolinguistic Programming Group (Group B) and it is a desirable difference.** It means that the effect of Neurolinguistic Programming was sustained even after the intervention and it further reduced the anxiety among 11 students.

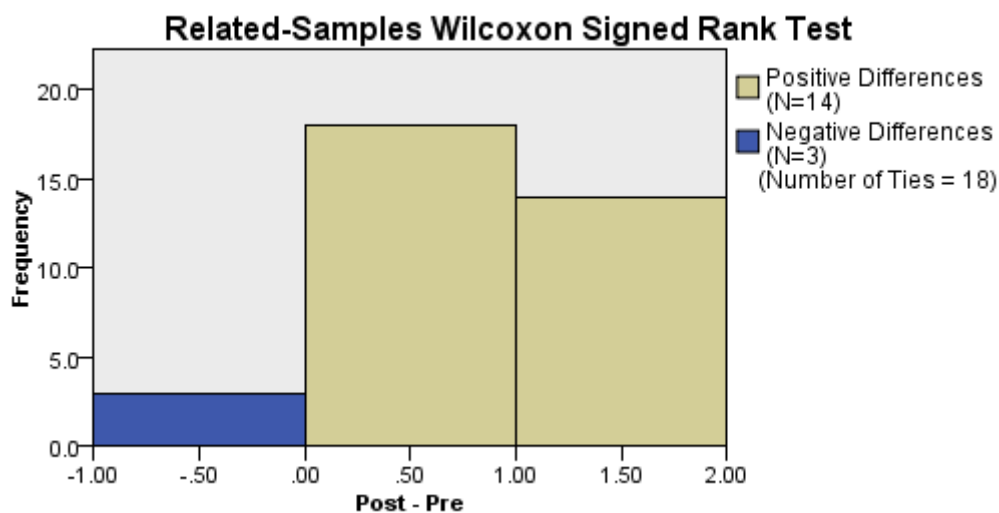
#### 4.9.4. Statistical Analysis of Hypotheses 7, 8, and 9:

**Hypothesis 7:** In Group C, there is no significant difference in the pre-test scores and post-test scores.

**Hypothesis 8:** In Group C, there is no significant difference in the pre-test scores and follow-up test scores.

**Hypothesis 9:** In Group C, there is no significant difference in the post-test scores and follow-up test scores.

- **Statistical Analysis of Hypothesis 7**

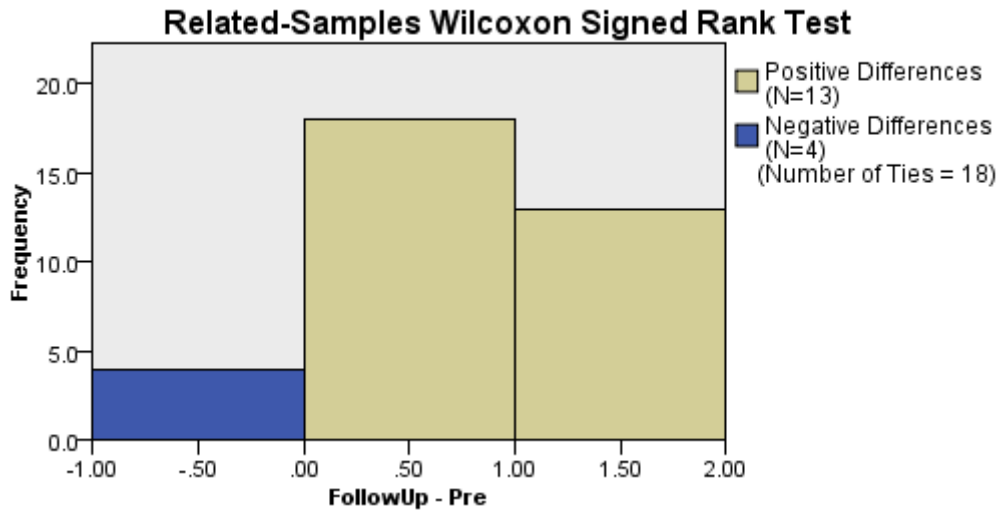


*Figure 4.14. Statistical Analysis of Hypothesis 7: Pre-test & Post-test Related Sample of Wilcoxon Signed-Ranks Test*

As it can be seen, in the above graph, only 3 students' score category (in blue color) reduced in the post-test score category when compared to the pre-test score category while 14 students' score category (right bar) increased in post-test when compared to the pre-test score category and 18 students' score category (middle bar) did not show any change in the score category.

Related-Samples Wilcoxon Signed-Ranks Test gave **P=0.008** and therefore, **Hypothesis 7** rejected and concluded that **there is a highly significant difference in the pre-test scores and post-test scores categories in the Control Group (Group C), however, the result is neither a desirable difference nor a positive difference.**

- Statistical Analysis of Hypothesis 8



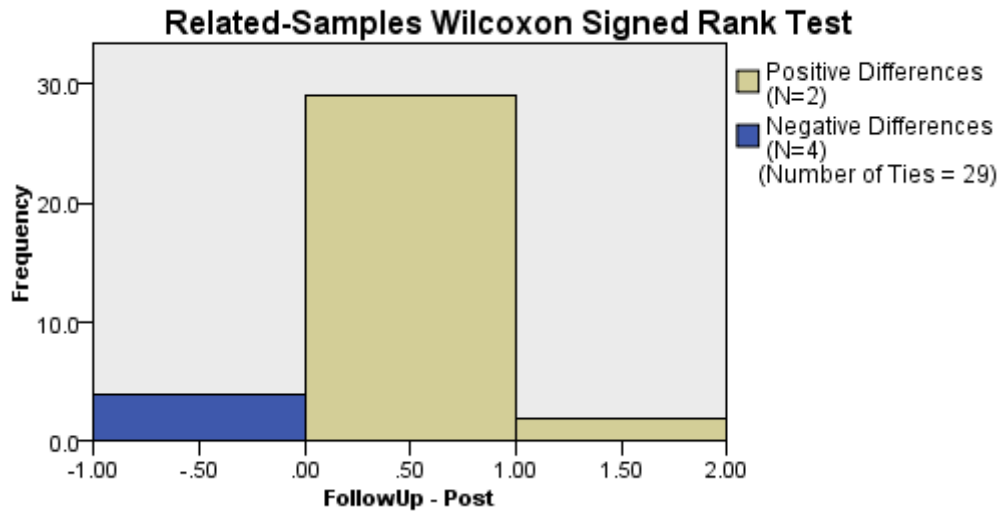
*Figure 4.15.* Statistical Analysis of Hypothesis 8: Follow-up & Pre-test Related Sample of Wilcoxon Signed-Ranks Test

As can be seen, in the above graph, only 4 students' score categories (blue bar) reduced in follow-up when compared to the pre-test score categories while 13 students' score categories (right bar) increased in follow-up when compared to the pre-test score category.

Related-Samples Wilcoxon Signed-Ranks Test gave  $P=0.029$  and therefore, **Hypothesis 8** is rejected and concluded that **there is a significant difference in the pre-test score categories and follow-up score categories in the Control Group (Group C), however, the result is neither a desirable difference nor a positive difference.**



- Statistical Analysis of Hypothesis 9



*Figure 4.16. Statistical Analysis of Hypothesis 9: Follow-up & Post-test Related Sample of Wilcoxon Signed-Ranks Test*

As It can be seen, in the above graph, only 4 students' score category (blue bar) reduced in follow-up when compared to post-test scores while 2 students' score category (right bar) increased in follow-up when compared to post-test scores and 29 students' score category (middle bar) did not show any change in the score category.

Related-Samples Wilcoxon Signed-Ranks Test gave **P=0.414** and therefore, **Hypothesis 9** is not rejected and concluded that **there is no significant difference in the post-test scores and follow-up test score categories in the Control Group (Group C).**

#### 4.9.5. Statistical Analysis of Hypotheses 10, 11, and 12:

**Hypothesis 10:** In post-test scores, there is no significant difference in Groups A and B.

**Hypothesis 11:** In post-test scores, there is no significant difference in Groups B and C.

**Hypothesis 12:** In post-test scores, there is no significant difference in Groups A and C.

- **Statistical Analysis of Hypothesis 10**

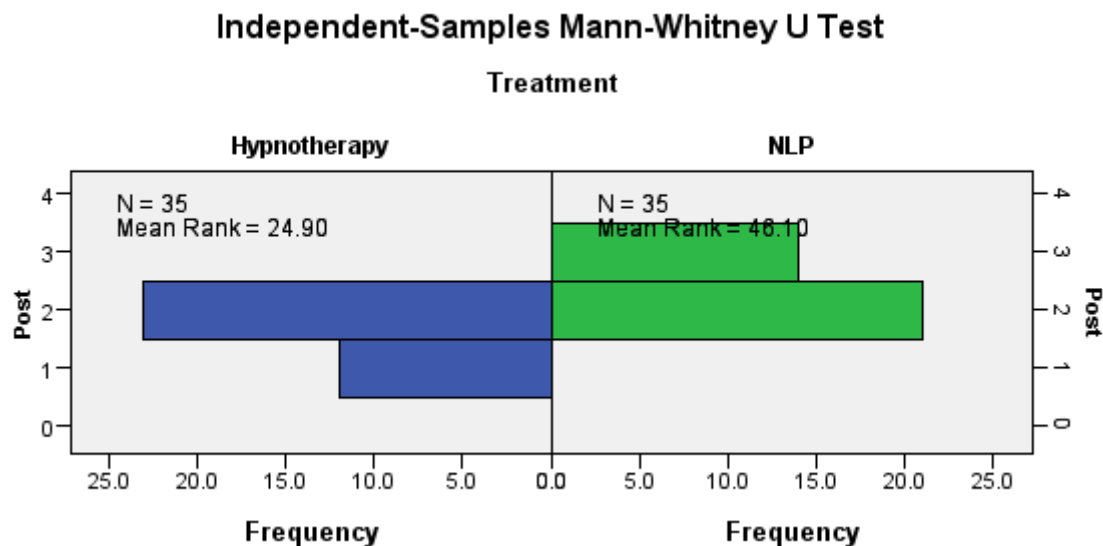
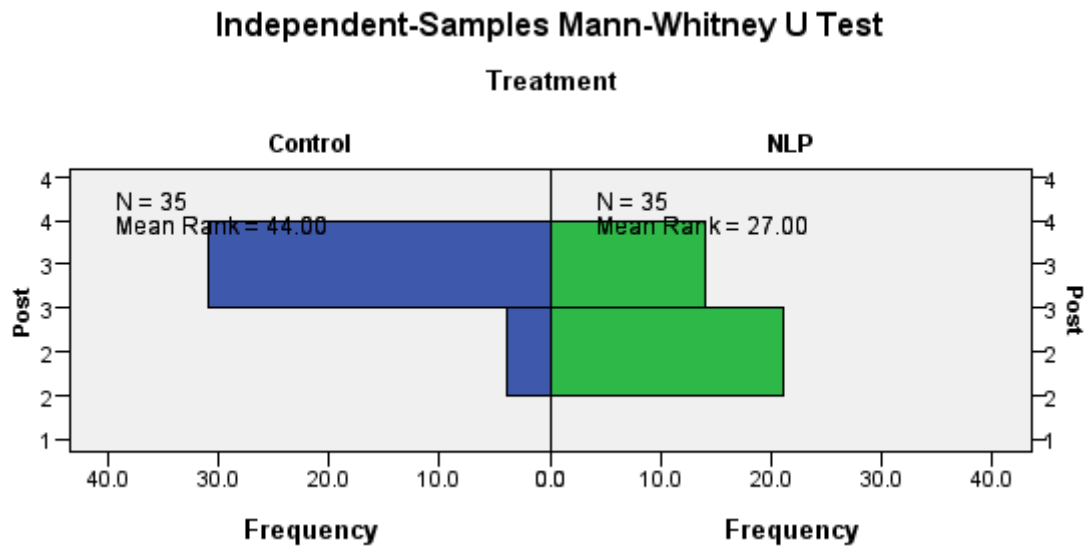


Figure 4.17. Statistical Analysis of Hypothesis 10: Mann-Whitney U test on Hypnotherapy Group A & NLP Group B

Independent-Samples Mann-Whitney U test gave  $P < 0.001$  and therefore, it is rejected **Hypothesis 10** and conclude that **there is a highly significant difference in the post-test scores category of Hypnotherapy and Neurolinguistic Programming Groups (Group B) with the score category of Neurolinguistic Programming Group (Group B) on the higher side.** It means that the Neurolinguistic Programming group had more anxiety score categories when compared to the Hypnotherapy group. The above graph shows the number of students (horizontal axis) with the score category (vertical axis).

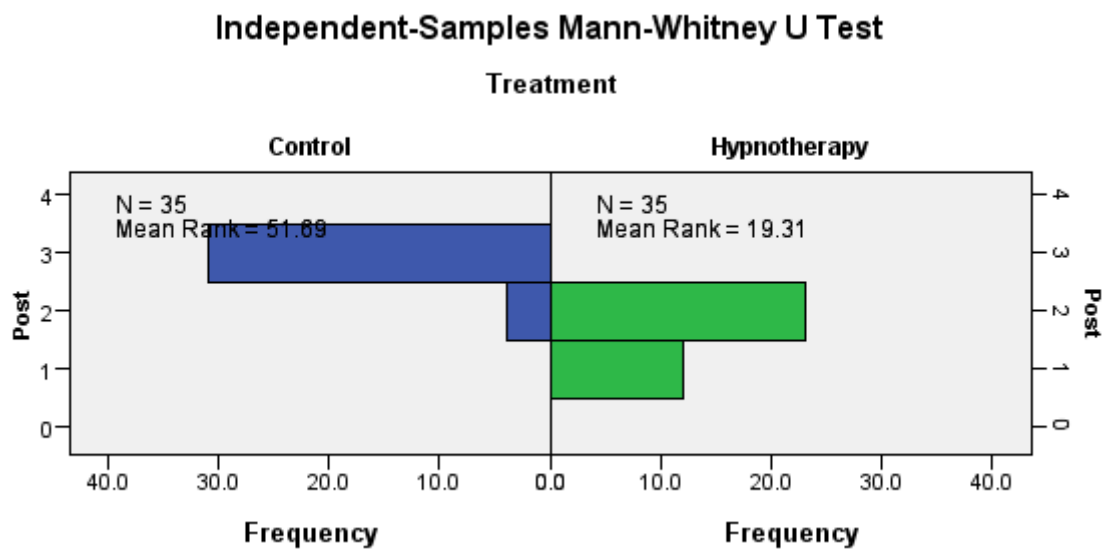
- **Statistical Analysis of Hypothesis 11**



*Figure 4.18. Statistical Analysis of Hypothesis 11: Mann-Whitney U test on Control Group C & NLP Group B*

Independent-Samples Mann-Whitney U test gave  $P < 0.001$  and therefore, **Hypothesis 11** is rejected and concluded that **there is a highly significant difference in the post-test scores category of Control Group (Group C) and Neurolinguistic Programming Groups (Group B) with the score category of Control Group (Group C) on the higher side.** It means that immediately after the intervention, the Control group had more students with higher anxiety score categories.

- **Statistical Analysis of Hypothesis 12**



*Figure 4.19. Statistical Analysis of Hypothesis 12: Mann-Whitney U test on Control Group C & Hypnotherapy Group A*

Independent-Samples Mann-Whitney U test gave  $P < 0.001$  and therefore, **Hypothesis 12** rejected and concluded that **there is a highly significant difference in the post-test score category of Control Group (Group C) and Hypnotherapy Group (Group A) with the score category of the Control Group (Group C) on the higher side.** It means that the Control group had more anxiety score category students when compared to the Hypnotherapy group.

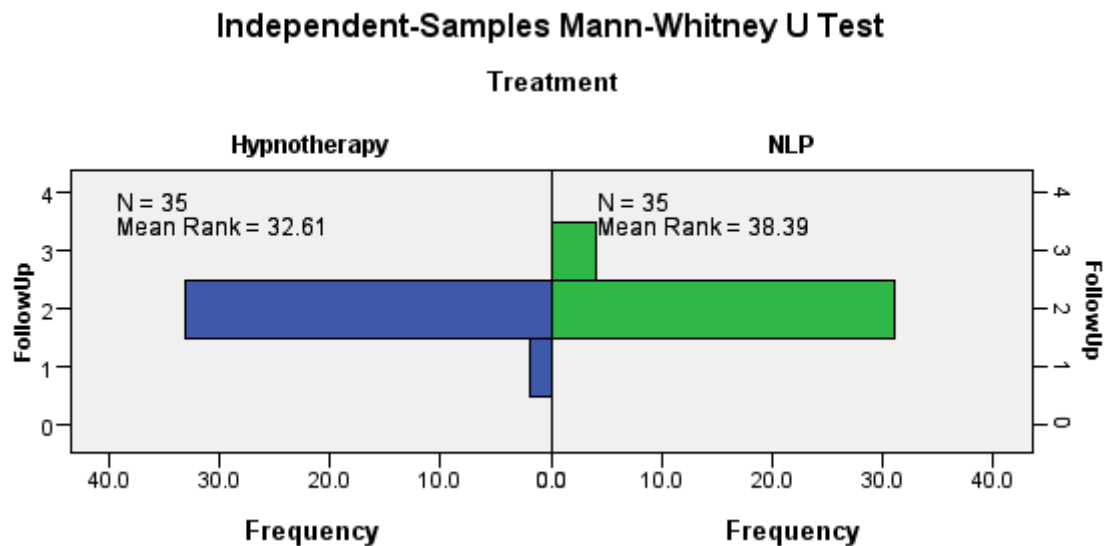
#### 4.9.6. Statistical Analysis of Hypotheses 13, 14, and 15:

**Hypothesis 13:** In follow-up scores, there is no significant difference in Groups A and B.

**Hypothesis 14:** In follow-up scores, there is no significant difference in Groups B and C.

**Hypothesis 15:** In follow-up scores, there is no significant difference in Groups A and C.

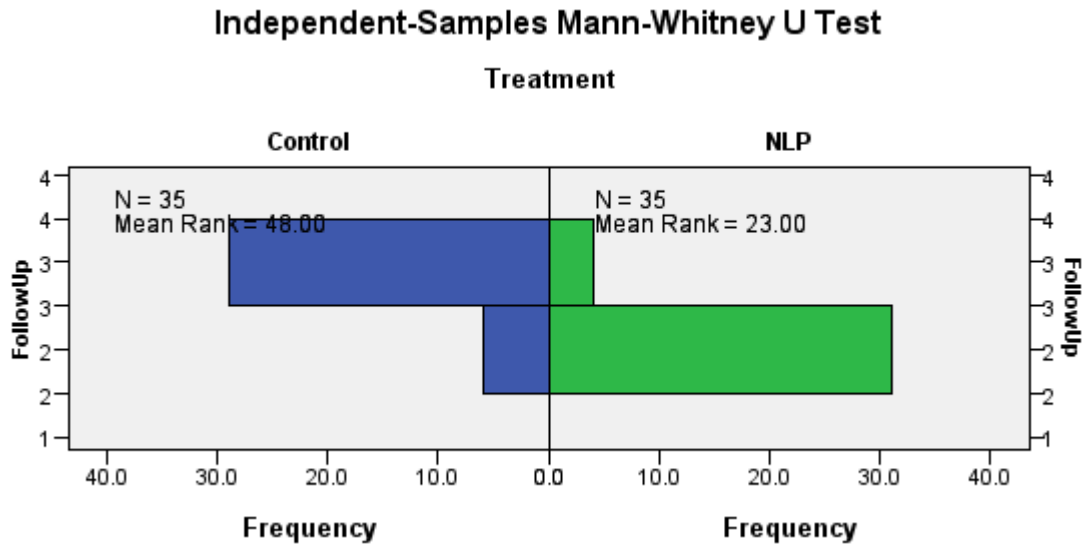
- **Statistical Analysis of Hypothesis 13**



*Figure 4.20.* Statistical Analysis of Hypothesis 13: Mann-Whitney U test on Hypnotherapy Group A & NLP Group B

Independent-Samples Mann-Whitney U test gave  $P < 0.015$  and therefore, **Hypothesis 13** rejected and concluded that **there is a highly significant difference in the follow-up test score category of Hypnotherapy Group (Group A) and Neurolinguistic Programming Groups (Group B) with the score category of Neurolinguistic Programming Group (Group B) on the higher side.** It means that in the Neurolinguistic Programming group, there were students with more anxiety score categories when compared with the Hypnotherapy group.

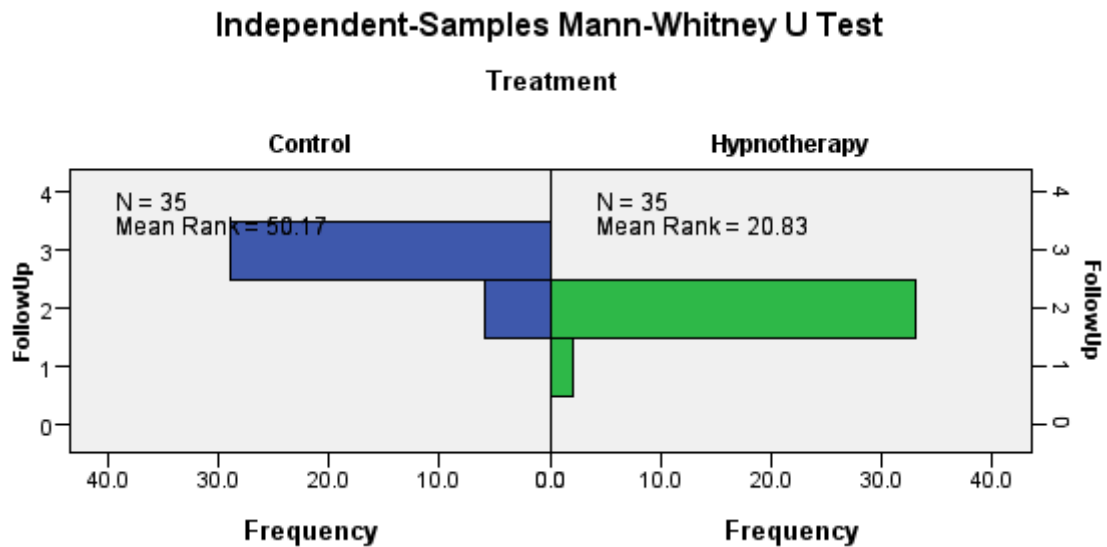
- **Statistical Analysis of Hypothesis 14**



*Figure 4.21. Statistical Analysis of Hypothesis 14: Mann-Whitney U test on Control Group C & NLP Group B*

Independent-Samples Mann-Whitney U test gave  $P < 0.001$  and therefore, **Hypothesis 14** rejected and conclude that **there is a highly significant difference in the follow-up Test score category of Control Group (Group C) and Neurolinguistic Programming Group (Group B) with the score category of Control Group on the higher side**, therefore, there were more students with anxiety score categories in the Control group when compared to the Neurolinguistic Programming Group (Group B).

- Statistical Analysis of Hypothesis 15



*Figure 4.22.* Statistical Analysis of Hypothesis 15: Mann-Whitney U test on Control Group C & Hypnotherapy Group B

Independent-Samples Mann-Whitney U test gave  $P < 0.001$  and therefore, **Hypothesis 15** is rejected and concluded that **there is a highly significant difference in the follow-up Test score category of Control Group (Group C) and Hypnotherapy Group (Group A) with the score category of the Control Group (Group C) on the higher side.** It means that in the follow-up data, the Control Group (Group C) had more students with a high anxiety score category compared to the Hypnotherapy Group (Group A).