About the Author

Dr. Neelam Mishra, a highly accomplished educator, researcher, counselor and motivational speaker with an illustrious career dedicated to the field of education. She holds a Ph.D. in Education with multiple master's degrees in English, Psychology, Political Science, and other disciplines, reflecting her deep intellectual curiosity and multidisciplinary expertise.

With a career spanning over 15 years, **Dr. Neelam Mishra** has made remarkable contributions to the education sector. She has published numerous research papers in esteemed journals, focusing on innovative teaching methodologies, student development and mental well-being. As a counselor and motivational speaker, she has inspired countless students, educators and professionals to overcome challenges and has achieved their dreams.

Her outstanding work has earned her numerous awards and recognitions in the education sector, solidifying her reputation as a thought leader and advocate for educational excellence. **Dr. Neelam Mishra** is deeply committed to transforming education through her teaching, research and motivational outreach, striving to create inclusive and empowering learning environments.

Her forthcoming book, **The Peer Tutoring Impact on Intellectually Disabled Children at the Primary Level** , draws from her vast experience and expertise, offering a valuable insights and practical strategies for educators, counselors and policy-makers. This book is a testament to her vision of making education a tool for empowerment and positive change.

She aims to inspire educators, counselors and policy-makers to create more supportive and inclusive educational spaces. She continues to inspire others with her unwavering dedication to lifelong learning and education.

Publisher

Social Research Foundation
128/170, H-Block, Kidwai Nagar, Kanpur-11
9335332333, 9839074762
www.socialresearchfoundation.com

ISBN

9 789393 166906

Price : 499 INR

The Peer Tutoring Impact on Intellectually Disabled Children at the Primary Level

ISBN : 978-93-93166-68-5

The Peer Tutoring Impact on Intellectually Disabled Children at the Primary Level

(Vol. - 2)

Dr. Neelam Mishra

The Peer Tutoring Impact On Intellectually Disabled Children At The Primary Level

Author

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128/170, H-Block, Kidwai Nagar, Kanpur-11
Uttar Pradesh, India
9335332333, 9839074762

Title	**:**	**The Peer Tutoring Impact On Intellectually Disabled Children At The Primary Level**
Author	:	Dr. Neelam Mishra
Publisher	:	Social Research Foundation
Publisher Address	:	128/170, H-Block, Kidwai Nagar, Kanpur, Uttar Pradesh, India
Printer's Detail	:	Social Research Foundation
Printer's Address	:	128/170, H-Block, Kidwai Nagar, Kanpur, Uttar Pradesh, India
Edition	:	2nd Edition, 2025
ISBN	**:**	**978-93-93166-68-5**
DOI	**:**	**10.5281/zenodo.14874599**
Cover Clips Source	:	Internet

Price : 499 INR

From the Author's Desk

Dear Readers,

It gives us immense pride to present this book, "The Impact of Peer Tutoring on Intellectually Disabled Children", a growing social issues. This book focuses on a field that holds the potential to bring about positive changes not only in the education system but also in society as a whole.

This book is dedicated to teachers, parents and everyone who demonstrates sensitivity and empathy toward children with intellectual disabilities. Peer tutoring is a method that not only educates children but also helps them become skilled, self-reliant, confident and socially capable.

The ideas, research and perspectives presented in this book are valuable not only for the field of education but also for helping society to understand that every child has immense potential and valuable assets for country. Peer tutoring's impact is not limited to the classroom; it fosters a sense of collaboration, empathy and social harmony among children.

We hope this book inspires your thoughts and helps to develop new perspectives in the field of inclusive education. Providing respect and opportunities to every child is our responsibility and this book is a small step in that direction.

Sincerely,

Dr. Neelam Mishra

Dedication

"To My Pillars Of Strength, My Husband And Son"

This book, "The Impact of Peer Tutoring on Intellectually Disabled Children", would not have been possible without the unwavering love, support and encouragement of my husband, Mr. Krishna Kant Mishra, Operational Director for an Australian Pharmaceutical Company, South-East Asia. Throughout this journey, you have been my greatest source of strength and motivation. Your belief in me and my work has been a constant reminder of why I embarked on this project. I dedicate this book to you, with profound gratitude for everything you have done to make this dream a reality. Thank you for always standing by my side and believing in my vision for this project.

This book is as much a part of my journey as it is yours, my dear son, Dr. Daksh Mishra, Government Medical College, Kota. Your love, curiosity and unwavering support have been a constant source of inspiration to me throughout this journey. As I delved into the complexities of education and inclusion, your bright spirit reminded me of the profound impact children like you can have on the world. This book is dedicated to you and to all the children who remind us daily of the boundless potential for growth, love and learning. You inspired me to work toward a world where every child, regardless of their abilities, can thrive. I hope this book sparks meaningful dialogue, encourages action and inspires further innovation in supporting intellectually disabled children at the primary level. Together, we can continue to build a world where every child's potential is recognized and celebrated. Thank you to all who strive to make inclusion not just a goal but a reality.

Finally, I dedicate this book to all those working tirelessly to create inclusive learning environments, where every child—regardless of their abilities—can thrive, learn, and grow. I hope this book serves as a small step toward a brighter and more equitable future for children with intellectual disabilities.

INDEX

Chapter - 1
Analysis And Interpretation Of Data

1.1 Introduction:

This chapter presents in sequential order the analysis of data for the verification of objectives laid down in the present investigation and thereafter provides appropriate interpretations. Various statistical techniques were applied for the purpose and a Five Percent level of significance was employed for statistically testing the various hypotheses of the study. The present study aimed at studying the effect of peer tutoring about Checklist for assessment for number skills (CANS-II), Checklist for assessment of communication skills (CACS), and Checklist for assessment of social skill (CASS) among peer tutors and peer tutees. As per the design and methodology discussed in the previous chapter, the booker collected the required data. The data was organized and coded systematically as per the requirement of the study. The objective-wise analysis and interpretation are in proceeding captions.

Table No. – 1.1

Communication Skills of Peer Tutors (Pre–Test)

Showing the ANOVA for the mean scores of communication skills based on Peer Tutors Pre – Test.

Sig. Level – 0.05

Source of variation	Df	SS	MSS	F – calculated
Between Factor	2	2.8	1.4	1.62
Within Error	42	36.2	0.86	
TOTAL	44	39		

F = (2, 42) = 1.62

df_1 = 2 and df_2 = 42

F at – .05 = 3.22

From table No. – 1.1, it is evident that communication skills peer tutors pre-test, the significance of the difference ANOVA value is calculated. The calculated ANOVA value df for variance between groups is 2 SS_B is 2.8 and MSS is 1.4. df for variance within groups is 42 SS_w is 36.2 and MSS

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0.86. The calculated ANOVA [F] value is 1.62. It is less than the critical or table value at 0.05 level. Hence there is no significant difference between the communication skills of the peer tutors in the pre-test. Therefore, the null hypothesis **"There is no significant variation between the pre-test mean score of peer tutors on communication skills"** is accepted. There is no significant variation between the pre-test mean scores of Peer tutors on CACS.

The above table suggests the findings of the initial condition of peer tutors i.e., where does it exist, and also suggests the status of their baseline. There is no significant variance among the peer tutors. We also observe the initial state of communication skills among peer tutors.

Table No. – 1.1

Showing the ANOVA for the mean scores of communication skills based on Peer Tutors (Pre – Test)

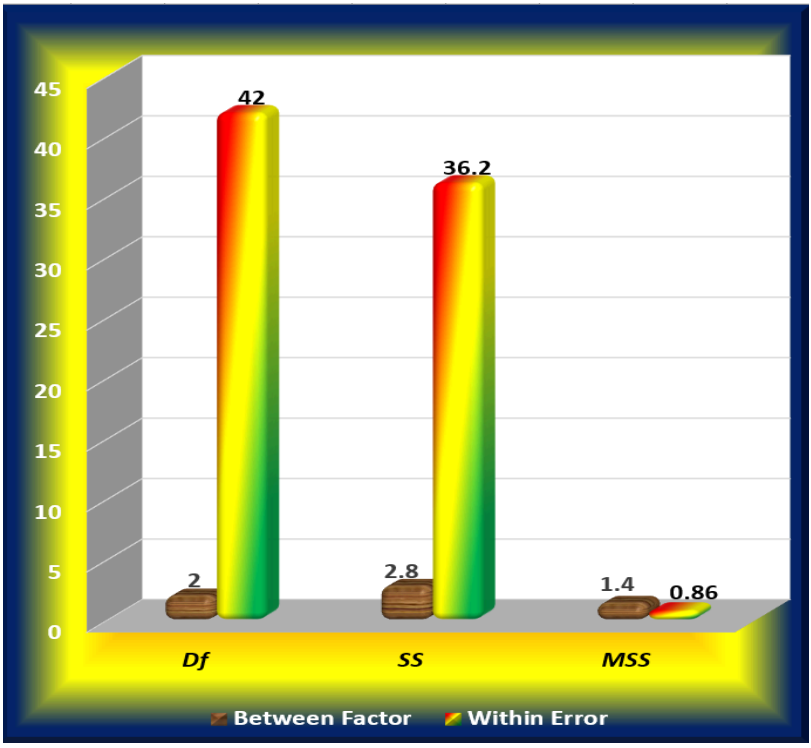

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Table No. – 1.2
Communication Skills of Peer Tutors (Post – Test)
Showing the ANOVA for the mean scores of communication skills based on Peer Tutors Post – Test.

Sig. Level – 0.05

Source of variation	Df	SS	MSS	F – calculated
Between Factor	2	2.31	1.15	0.10
Within Error	42	44.14	1.05	
TOTAL	44	46.45		

F = (2, 42) = 0.10

df_1 = 2 and df_2 = 42

F at – .05 = 3.22

From table No. – 1.2, it is evident that communication skills peer tutors post-test, the significance of the difference ANOVA value is calculated. The calculated ANOVA value df for variance between groups is 2 SS_B is 2.31 and MSS is 1.15. df for variance within groups is 42 SS_w is 44.14 and MSS 1.05. The calculated ANOVA [F] value is 0.10. It is less than the critical or table value at 0.05 level. Hence there is no significant difference between the communication skills of the peer tutors in post-test. Therefore, the null hypothesis **"There is no significant variation between the post-test mean scores of peer tutors on communication skills"** is accepted. There is no significant variation between the post-test mean scores of Peer tutors on CACS.

This table demonstrates to us the final conditions among the peer tutors to their initial state and communication skills. From this table, we also conclude that there is no significant variance among the groups. It means that communication skills of intellectually disabled tutors with post-test stage prevailed significantly increased among the variance of peer tutors.

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Table No. – 1.2
Showing the ANOVA for the mean scores of communication skills based on Peer Tutors (Post – Test)

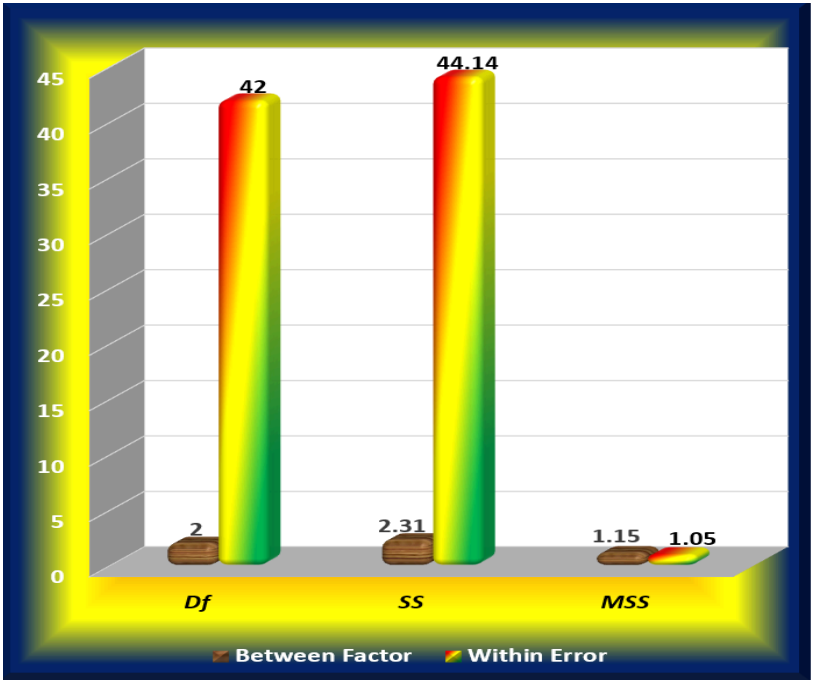

Table No. – 1.3
Communication Skills of Peer Tutors (Pre – Test, and Post – Test)
Paired sample statistics of communication skills of Peer Tutors Pre – Test and Post – Test

Sig.Level - 0.05

	Mean	S.D.	t – value
Pre – Test	45	4.583	11.47
Post – Test	61.67	4.163	P<0.05, df = 2

The above table shows that the combined mean scores of tutors on the pre-test was 45 which increased up to 61.67 and S.D. decreased from 4.583 to 4.163. The increase in mean and decrease in S.D. reveals improvement in all tutors as well as increased homogeneity in the group after intervention. Also, the calculated value of t is greater than the table

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value of t at the level of significance 0.05 which suggests rejecting null hypothesis H_0 and to accept alternative hypothesis H_1 i.e., there is a significant difference between pre-test and post-test scores of peer tutors on communication skills. Therefore, the null hypothesis **"There is no significant difference between the pre-test and post-test mean scores of peer tutors on communication skills"** is rejected. The above table indicates the significant improvement in the communication skills of peer tutors.

This table compares the mean scores of pre-test and post-test. From the above discussion, it is also concluded that the mean scores of post-test are higher than the mean scores of pre-test of peer tutors in CACS. Hence, we calculated the value of the t-test and it suggests that our null hypothesis is rejected. This is also proving that there is a significant difference between peer tutors. The table also comments that there is a significant effect of peer tutoring on communication skills. This finding is supported by after studies also. Slavin (1990); O'Donnell, (2006) indicated in their have a look that running with other children to attain shared meanings and goals, advantages newcomers to sell social and emotional consequences that further helps in building effective relationships among peers.

This table demonstrates to us the final conditions among the peer tutors for their initial state and communication skills. From this table, we also conclude that there is no significant variance among the groups. It means that communication skills of intellectually disabled tutors with post-test stage prevailed significantly increased among the variance of peer tutors.

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Table No. – 1.3
Paired sample statistics of communication skills of Peer Tutors (Pre – Test, and Post – Test)

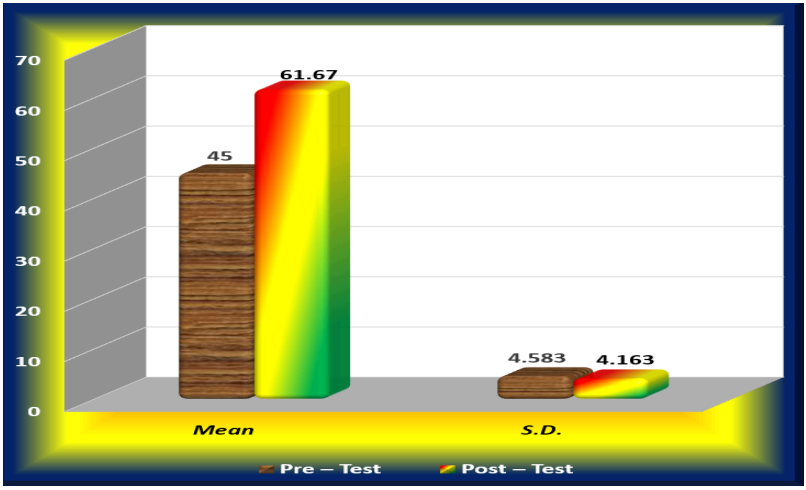

Table No. – 1.4
Social Skills of Peer Tutors (Pre–Test)
Showing the ANOVA for the mean score of Social Skills based on Peer Tutors Pre – Test

Sig. Level – 0.05

Source of variation	Df	SS	MSS	F – calculated
Among Factor	2	1.9	0.95	1.37
Within Error	57	39.35	0.69	
TOTAL	59			

F = (2, 57) = 1.37
df_1 = 2 and df_2 = 57
F at – .05 = 3.16

From table no. – 1.4 it can be concluded that in the Pre-test of Social Skills, the significant difference of the ANOVA value is calculated. In the calculated ANOVA value, the degree of freedom for variance among the group is found to be 2. It can be also seen from the table that, the sum of squares among groups and the mean sum of the square is 1.9 and 0.95 respectively.

In the same way, the above table also demonstrates that the degree of freedom for variance within the group is found to be 57. The table

also reveals that the sum of squares within groups and the mean sum of the square is 39.35 and 0.69 respectively. From above the data, the F-calculated value for the ANOVA test is computed to be 1.37. The F-calculated value is lesser than the F-tabulated or F-critical value at 0.05 significant level. Hence, it is concluded from the above discussion that, there is no significant difference among the pre-test of peer tutors in Social skills. Therefore, the null hypothesis**, "There is no significant variation between the pre-test mean scores of peer tutors on social skills"** is accepted.

The fact that ANOVA for pre-test scores on social skills of peer tutors is that it has no significant difference. This table also revealed the baseline condition among the peer tutors for their initial state and social skills.

This finding is supported by other studies also osguthrope, Eiserman, and Shisler indicate in their study increased social acceptance of children with mental retardation and also that children with mental retardation were able to teach signed language to their non – disabled peers.

Table No. – 1.4

Showing the ANOVA for the mean score of Social Skills based on Peer Tutors (Pre – Test)

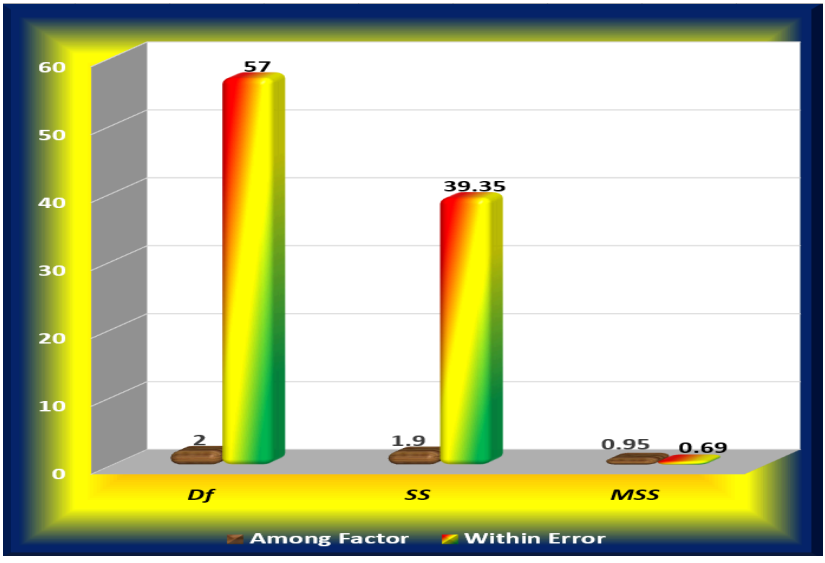

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Table No. – 1.5
Social Skills of Peer Tutors (Post–Test)
Showing the ANOVA for the mean score of Social Skills based on Peer Tutors Post–Test

Sig. Level – 0.05

Source of variation	df	SS	MSS	F – calculated
Among Factor	2	1.64	0.82	1.84
Within Error	57	25.35	0.444	
TOTAL	59			

F = (2, 57) = 1.84
df_1 = 2 and df_2 = 57
F at – .05 = 3.16

From table no. – 1.5, it can be concluded that in the Post-test of Social Skills, the significant difference of the ANOVA value is calculated. In the calculated ANOVA value, the degree of freedom for variance among the group is found to be 2. It can be also seen from the table that, the sum of squares among groups and the mean sum of the square is 1.64 and 0.82 respectively.

In the same way, the above table also demonstrates that the degree of freedom for variance within the group is found to be 57. The table also reveals that the sum of squares within groups and the mean sum of the square is 25.35 and 0.444 respectively. From above the data, the F-calculated value for the ANOVA test is computed to be 1.84. The F-calculated value is lesser than the F-tabulated or F-critical value at 0.05 significant level. Hence, it is concluded from the above discussion that, there is no significant difference among the Post-test of peer tutors in Social skills. Therefore, the null hypothesis, **"There is no significant variation between the Post-test mean scores of peer tutors on social skills"** is accepted.

This table demonstrates to us the final conditions among the peer tutors for their initial state and social skills. From this table, we also conclude that there is no significant variance among the groups. It means that the social skills of intellectually disabled tutors with post-test stage prevailed significantly increased among the variance of peer tutors.

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Table No. – 1.5
Showing the ANOVA for the mean score of Social Skills based on Peer Tutors (Post – Test)

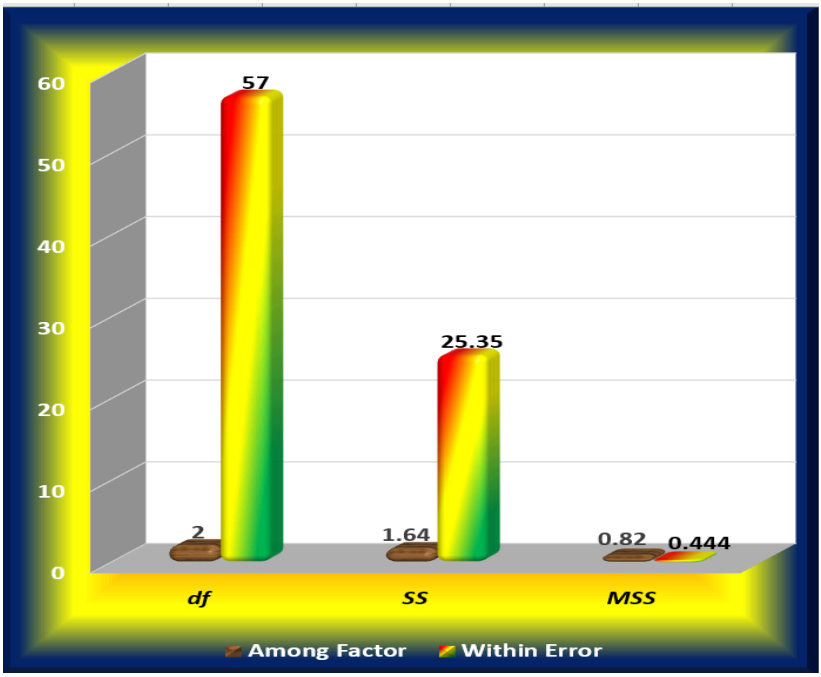

Table No. – 1.6
Paired Sample t-test to see the significance of the achievement of tutors on Social Skills
Paired sample t-test result of Social Skills of Peer Tutors

	Mean	S.D.	t – value
Pre – Test	45	4.359	37.99
Post – Test	90	4.04	P<0.05, df = 2

The above table shows that the combined mean scores of tutors on the pre-test was 45 which increased up to 90 and S.D. decreased from 4.359 to 4.04. The increase in mean and decrease in S.D. reveals improvement in all tutors as well as increased homogeneity in the group after intervention. Also, the calculated value of t is greater than the table value of t at the level of significance 0.05 which suggests rejecting null

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hypothesis H_0 and to accept alternative hypothesis H_1 i.e., there is a significant difference between pre-test and post-test scores of peer tutors on social skills of peer tutors pre-test and post-test. Therefore, the null hypothesis **"There is no significant difference between the pre-test and post-test mean scores of peer tutors on social skills"** is rejected.

The above table indicates the significant improvement in social skills of peer tutors This table compares the mean scores of pre and post-test. From the above discussion, it is also concluded that the mean scores of post-test are higher than the mean scores of pre-test of peer tutors in social skills. Hence, we calculated the value of the t-test and it suggests that our null hypothesis is accepted. This is also proving that there is no significant difference between the pre and post-test mean scores of peer tutors on social skills.

Table No. – 1.6

Paired sample t-test result of Social Skills of Peer Tutors.

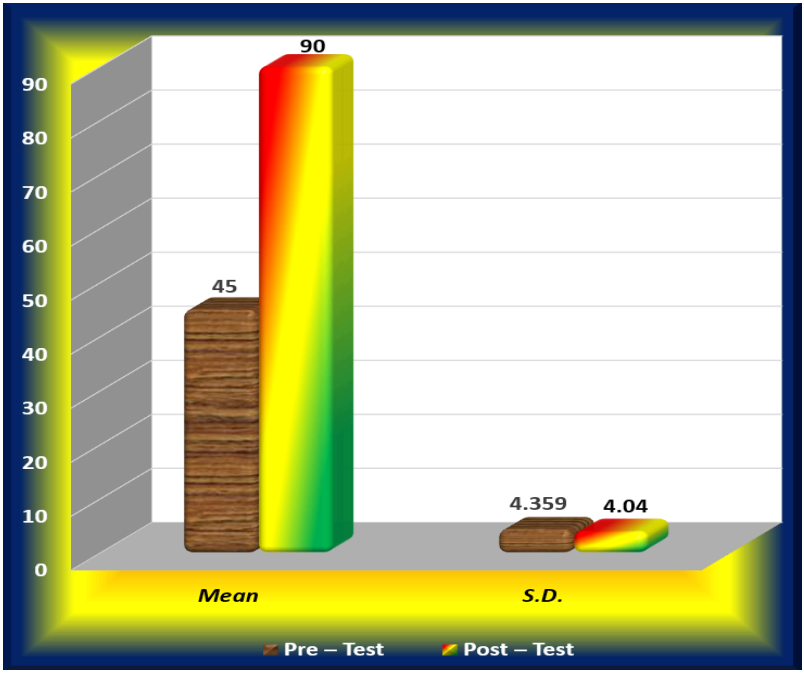

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Table No. – 1.7
CANS – 2 [Number Skills – 2] on Peer Tutees (Pre-test)
Showing the ANOVA for the mean score of Number Skills – 2 based on Peer Tutees Pre–Test

Sig. Level – 0.05

Source of variation	Df	SS	MSS	F – calculated
Among Factor	2	11.2	5.6	10.18
Within Error	57	31.65	0.55	
TOTAL	59			

F = (2, 57) = 10.18
df_1 = 2 and df_2 = 57
F at – .05 = 3.16

From table no. – 1.7, it can be concluded that in the Pre-test of checklist Assessment Number the significant difference of the ANOVA value is calculated. In the calculated ANOVA value, the degree of freedom for variance among the group is found to be 2. It can be also seen from the table that, the sum of squares among groups and the mean sum of the square is 11.2 and 5.6 respectively.

In the same way, the above table also demonstrates that the degree of freedom for variance within the group is found to be 57. The table also reveals that the sum of squares within groups and the mean sum of the square is 31.65 and 0.55 respectively. From above the data, the F-calculated value for the ANOVA test is computed to be 10.18. The F-calculated value is greater than the F-tabulated or F-critical value at 0.05 significant level. Hence, it is concluded from the above discussion that, there is a significant difference among the pre-test of peer tutors in Checklist Assessment Number Skills. Therefore, the null hypothesis, **"There is no significant variation between the pre-test mean scores of peer tutors on CANS – 2"** is rejected. Thus, there is a significant difference between ANOVA peer tutees in CANS – 2. Therefore, the above framed null hypothesis H_0 is rejected. The above table suggests the findings of the initial condition of peer tutees i.e., where does it exist, and also suggests the status of their baseline. We can conclude that there is a significant effect in the pre-test of peer tutees on Number Skills – 2.

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Table No. – 1.7
Showing the ANOVA for the mean score of Number Skills – 2 based on Peer Tutors (Pre – Test)

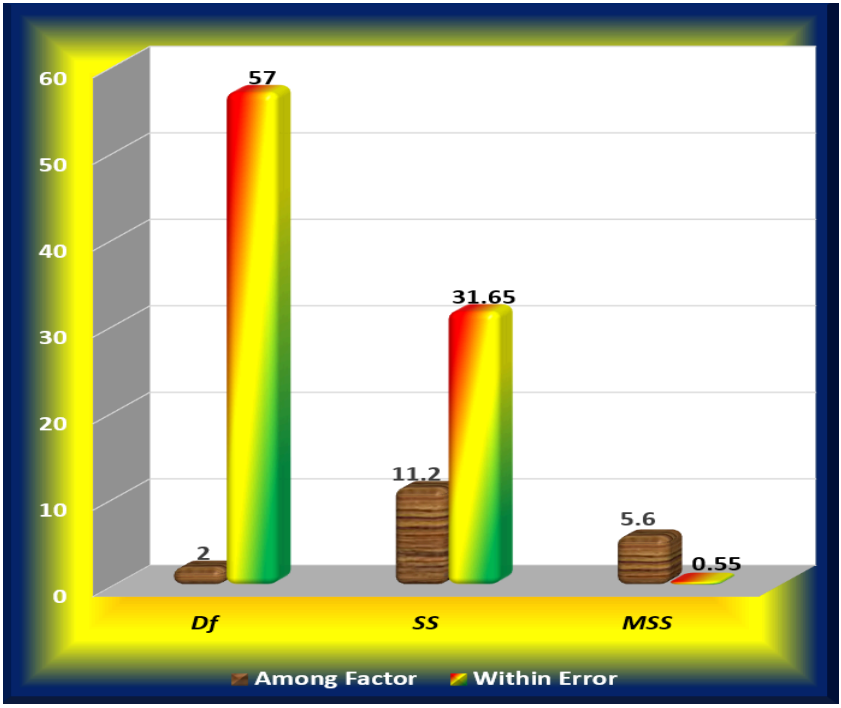

Table No. – 1.8
CANS – 2 [Number Skills – 2] on Peer Tutees (Post-test)
Showing the ANOVA for the mean score of Number Skills – 2 based on Peer Tutees Post–Test

Sig. Level – 0.05

Source of variation	Df	SS	MSS	F – calculated
Among Factor	2	6.64	3.32	1.39
Within Error	57	135.95	2.38	
TOTAL	59	142.59		

F = (2, 57) = 1.39
df_1 = 2 and df_2 = 57
F at – .05 = 3.16

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From table no. – 1.8, it can be concluded that in the Post-test of Checklist Assessment Number – 2 skills, the significant difference of the ANOVA value is calculated. In the calculated ANOVA value, the degree of freedom for variance among the group is found to be 2. It can be also seen from the table that, the sum of squares among groups and the mean sum of the square is 6.64 and 3.32 respectively.

In the same way, the above table also demonstrates that the degree of freedom for variance within the group is found to be 57. The table also reveals that the sum of squares within groups and the mean sum of the square is 135.95 and 2.38 respectively. From above the data, the F-calculated value for the ANOVA test is computed to be 1.39. The F-calculated value is lesser than the F-tabulated or F-critical value at 0.05 significant level. Hence, it is concluded from the above discussion that, there is no significant difference among the post-test of peer tutees in Checklist Assessment Number Skills. Therefore, the null hypothesis, **"There is no significant variation between the post-test mean scores of peer tutees on Number Skills – 2"** is accepted. Thus, there is no significant difference among peer tutees in Number Skills – 2. Therefore, the above framed null hypothesis H_0 is accepted.

This table demonstrates to us the final condition among the peer tutees for their initial state and Number Skills. Tutees showed a significant gain in number skills.

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Table No. – 1.8

Showing the ANOVA for the mean score of Number Skills – 2 based on Peer Tutors (Post – Test)

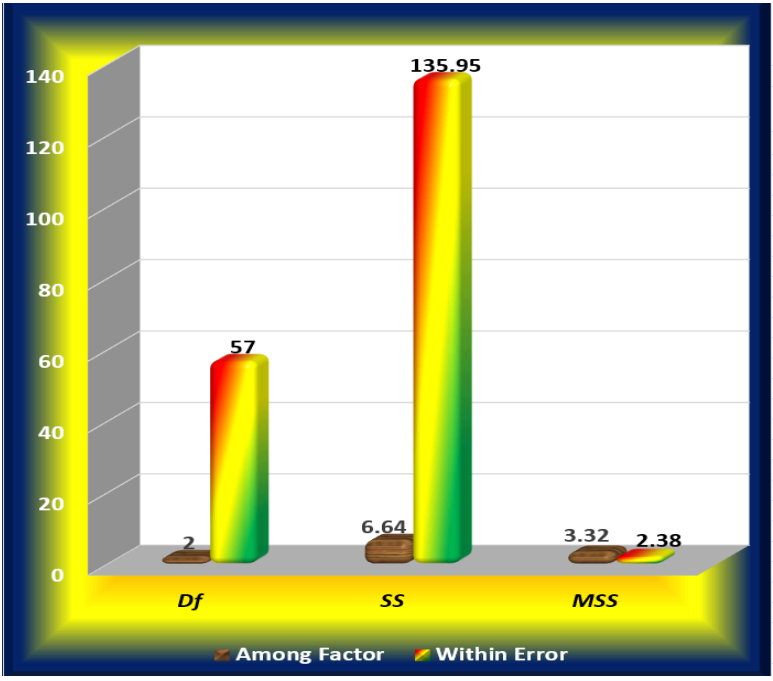

Table No. – 1.9

Paired Sample t-test to see the significance of the achievement of tutees on CANS – 2

Sig. Level – 0.05

	Mean	S.D.	t – value
Pre – Test	41	10.58	16.4
Post – Test	88.33	8.14	P<0.05, df = 2

The above table shows that the combined mean scores of tutees on the pre-test was 41 which increased up to 88.33 and S.D. decreased from 10.58 to 8.14. The increase in mean and decrease in S.D. reveals improvement in all tutees as well as increased homogeneity in the group after intervention. Also, the calculated value of t is greater than the table

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value of t at the level of significance 0.05 which suggests rejecting null hypothesis H_0 and to accept alternative hypothesis H_1 i.e., there is a significant difference between pre-test and post-test scores of peer tutees Number Skills – 2. Since the calculated t value is greater than that of the tabular value. So, the null hypothesis H_0 at 0.05 level for df – 2 is rejected. Therefore, the null hypothesis **"There is no significant difference between the Pre-test and Post-test mean score of peer tutees on Number Skills – 2"** is rejected. The above table indicates the significant improvement in the Number Skills of Peer tutees.

This table compares the mean scores of pre and post-test. From the above discussion, it is also concluded that the mean scores of post-test are higher than the mean scores of pre-test of peer tutees in Number Skills – 2. Hence, we calculated the value of the t-test and it suggests that our null hypothesis is rejected. The t-test and suggests that our null hypothesis is rejected. The t-test indicated that there is a significant improvement in the performance of tutees on Number Skills – 2.

Table No. – 4.9
Paired sample t-test to see the significance of the achievement of tutees on CANS – 2

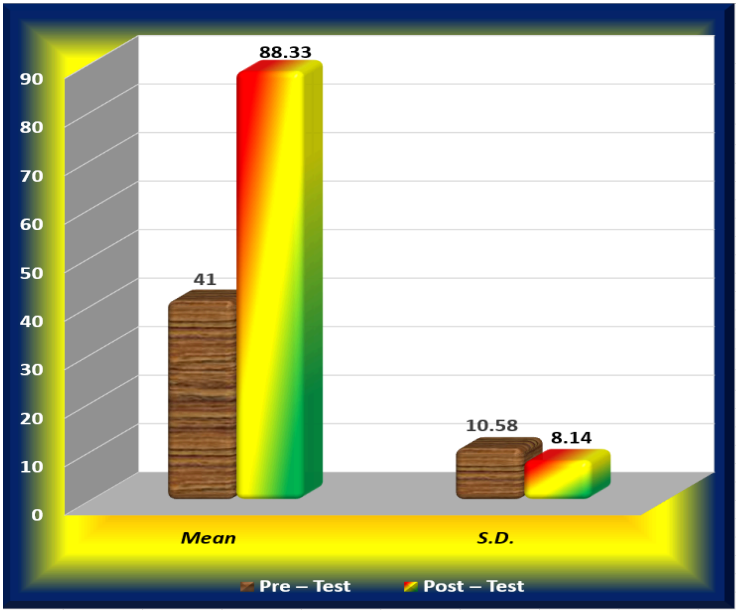

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Table No. – 1.10
Task – 1 (Pre-test)
Showing the ANOVA for the mean scores of Task – 1 based on Peer Tutees Pre–Test

Sig. Level – 0.05

Source of variation	Df degree of freedom	SS Sum of Square	MSS Mean Sum of Square	F – calculated
Among Factor	2	0.72	0.36	1.61
Within Error	33	19.17	0.58	
TOTAL	35	19.89		

F = (2, 33) = 1.61

df_1 = 2 and df_2 = 33

F at – .05 = 3.29

From table no. – 1.10, it can be concluded that in the Pre-test of Task – 1, the significant difference of the ANOVA value is calculated. In the calculated ANOVA value, the degree of freedom for variance among the group is found to be 2. It can be also seen from the table that, the sum of squares among groups and the mean sum of the square is 0.72 and 0.36 respectively.

In the same way, the above table also demonstrates that the degree of freedom for variance within the group is found to be 33. The table also reveals that the sum of squares within groups and the mean sum of the square is 19.17 and 0.58 respectively. From above the data, the F-calculated value for the ANOVA test is computed to be 1.61. The F-calculated value is lesser than the F-tabulated or F-critical value at 0.05 significant level. Hence, it is concluded from the above discussion that, there is no significant difference among the pre-test of peer tutors in Task – 1. Therefore, the null hypothesis, **"There is no significant variation among the pre-test mean scores of peer tutors on Task – 1"** is accepted. Thus, there is no significant variation among peer tutees in Task – 1. Therefore, the above framed null hypothesis H_0 is accepted. The above table suggests the findings of the initial condition of peer tutees i.e., where does it exist, and also suggests the status of their baseline. There is no significant variance among the peer tutees. We also observe the initial state of Task – 1 among peer tutees.

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Table No. – 1.10
Showing the ANOVA for the mean scores of Task – 1 based on Peer Tutees (Pre – Test)

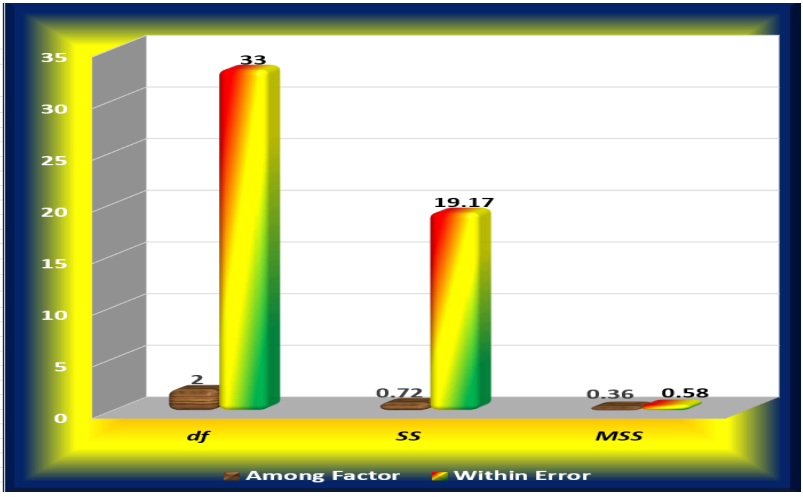

Table No. – 1.11
Task – 1 (Post-test)
Showing the ANOVA for the mean scores of Task – 1 based on Peer Tutees Post – Test

Sig. Level 0.05

Source of variation	df	SS	MSS	F – calculated
Among Factor	2	0.05	0.025	31
Within Error	33	25.59	0.775	
TOTAL	35	25.64		

F = (2, 33) = 31

df_1 = 2 and df_2 = 33

F at – .05 = 3.29

From table no. – 1.11, it can be concluded that in the Post-test of Task – 1, the significant difference of the ANOVA value is calculated. In the calculated ANOVA value, the degree of freedom for variance among the group is found to be 2. It can be also seen from the table that, the sum of

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squares among groups and the mean sum of the square is 0.05 and 0.025 respectively.

In the same way, the above table also demonstrates that the degree of freedom for variance within the group is found to be 33. The table also reveals that the sum of squares within groups and the mean sum of the square is 25.59 and 0.775 respectively. From above the data, the F-calculated value for the ANOVA test is computed to be 31. The F-calculated value is greater than the F-tabulated or F-critical value at 0.05 significant level. Hence, it is concluded from the above discussion that, there is a significant difference among the post-test of peer tutees in Task – 1. Therefore, the null hypothesis, **"There is no significant variation between the post-test mean scores of peer tutees on Task – 1"** is rejected. Thus, there is no significant difference among peer tutees in Task – 1. Therefore, the above framed null hypothesis H_0 is rejected.

This table demonstrates to us the final condition among the peer tutees for their initial state and Task – 1. From this table, we also conclude that there is significant variance among the groups.

Table No. – 1.11

Showing the ANOVA for the mean scores of Task – 1 based on Peer Tutees (Post – Test)

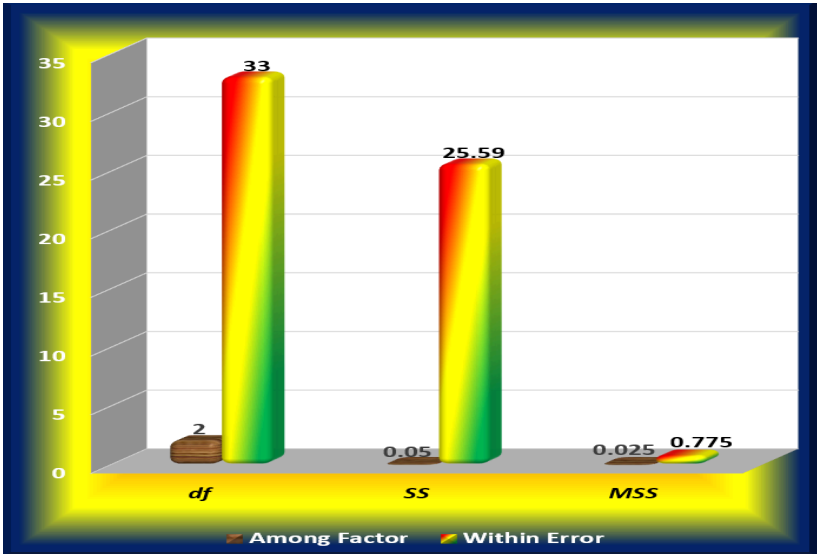

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Table No. – 1.12
Paired Sample t-test to see the significance of the achievement of Tutees on Task – 1

Sig. Level – 0.05

	Mean	**S.D.**	**t – value**
Pre – Test	18.66	2.08	27.71
Post – Test	50.33	0.577	P<0.05, df = 2

The above table shows that the combined mean scores of tutees on Task – 1 was 18.66 which increased up to 50.33 and S.D. decreased from 2.08 to 0.577. The increase in mean and decrease in S.D. reveals improvement in all tutees as well as increased homogeneity in the group after intervention. Also, the calculated value of t is greater than the table value of t at the level of significance 0.05 which suggests rejecting null hypothesis H_0 and to accept alternative hypothesis H_1 i.e., there is a significant difference between pre-test and post-test scores of peer tutees on Task – 1. Therefore, the null hypothesis **"There is no significant difference between the Pre-test and Post-test mean score of peer tutees on Task – 1"** is rejected. The table indicates the significant improvement in Task – 1 of Peer tutees.

This table also compares the mean scores of pre and post-test. From the above discussion, it concludes that the mean scores of post-test are higher than the mean scores of pre-test of peer tutees in Task – 1. Hence, we calculated the value of the t-test and it suggests that our null hypothesis is rejected. This also proves that there is a significant difference between the pre and post-test mean scores of peer tutees on Task – 1.

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Table No. – 1.12
Paired sample t-test to see the significance of the achievement of tutees on Task – 1

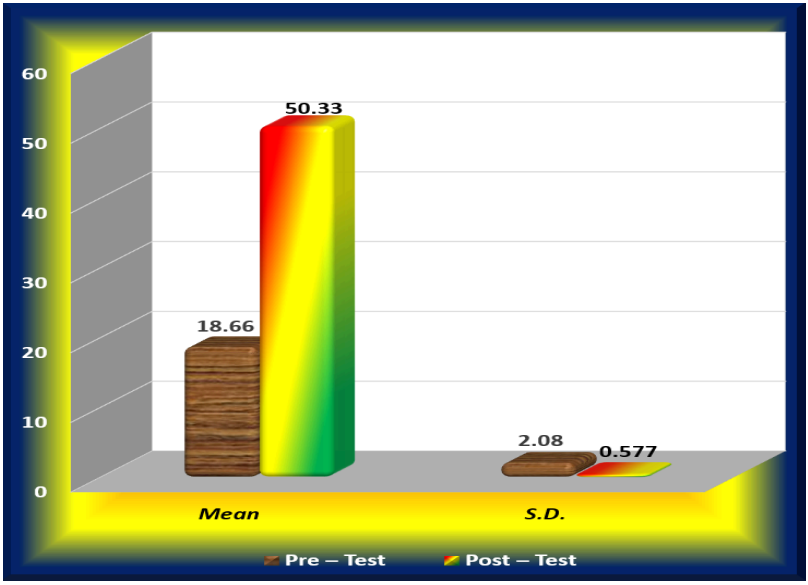

Table 1.13

Task – 2 (Pre-test)
Showing the ANOVA for the mean scores of Task – 2 based on Peer Tutees Pre–Test

Sig. Level – 0.05

Source of variation	df degree of freedom	SS Sum of Square	MSS Mean Sum of Square	F – calculated
Among Factor	2	0.5	0.25	4.52
Within Error	33	37.5	1.13	
TOTAL	35	38		

F = (2, 33) = 4.52
df_1 = 2 and df_2 = 33
F at – .05 = 3.29

From table no. – 1.13 it can be concluded that in the Pre-test of Task – 2, the significant difference of the ANOVA value is calculated. In the calculated ANOVA value, the degree of freedom for variance among the group is found to be 2. It can be also seen from the table that, the sum of

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squares among groups and the mean sum of the square is 0.5 and 0.25 respectively.

In the same way, the above table also demonstrates that the degree of freedom for variance within the group is found to be 33. The table also reveals that the sum of squares within groups and the mean sum of the square is 37.5 and 1.13 respectively. From above the data, the F-calculated value for the ANOVA test is computed to be 4.52. The F-calculated value is greater than the F-tabulated or F-critical value at 0.05 significant level. Hence, it is concluded from the above discussion that, there is a significant difference among the pre-test of peer tutees in Task – 2. Therefore, the null hypothesis, **"There is no significant variation among pre-test mean scores of peer tutees on Task – 2"** is rejected. Thus, there is a significant difference among peer tutees in Task – 2. Therefore, the above framed null hypothesis H_0 is rejected at a significant level of 0.05. There is significant variance among the peer tutees on Numeral Symbol.

Table No. – 1.13

Showing the ANOVA for the mean scores of Task – 2 based on Peer Tutees Pre–Test

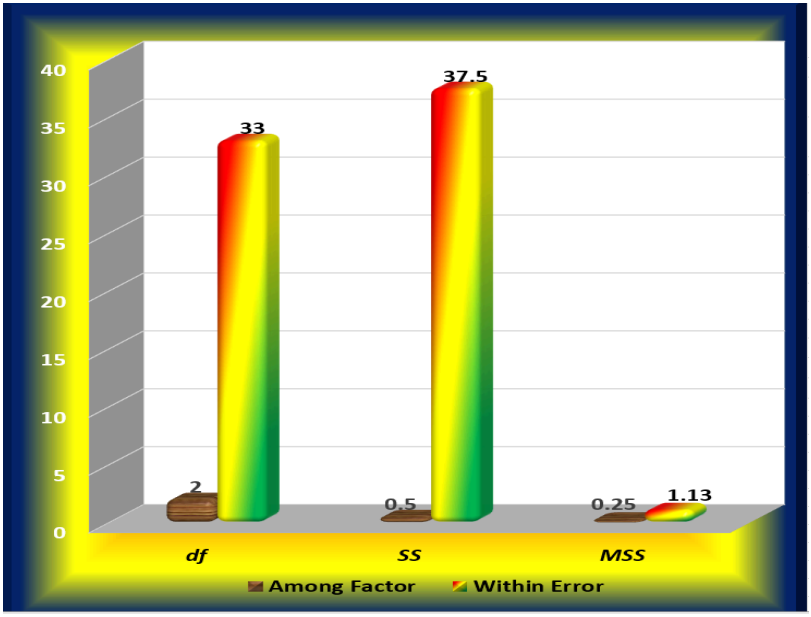

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Table No. – 1.14
Task – 2 (Post-test)
Showing the ANOVA for the mean scores of Task – 2 based on Peer Tutors Post–Test

Sig. Level – 0.05

Source of variation	df	SS	MSS	F – calculated
Among Factor	2	6.06	3.03	2.85
Within Error	33	35.17	1.06	
TOTAL				

F = (2, 33) = 2.85
df_1 = 2 and df_2 = 33
F at – .05 = 3.29

From table no. – 1.14, it can be concluded that in the Post-test of Task – 2, the significant difference of the ANOVA value is calculated. In the calculated ANOVA value, the degree of freedom for variance among the group is found to be 2. It can be also seen from the table that, the sum of squares among groups and the mean sum of the square is 6.06 and 3.03 respectively.

In the same way, the above table also demonstrates that the degree of freedom for variance within the group is found to be 33. The table also reveals that the sum of squares within groups and the mean sum of the square is 35.17 and 1.06 respectively. From above the data, the F-calculated value for the ANOVA test is computed to be 2.85. The F-calculated value is lesser than the F-tabulated or F-critical value at 0.05 significant level. Hence, it is concluded from the above discussion that, there is no significant difference among the post-test of peer tutees in Task – 2. Therefore, the null hypothesis, **"There is no significant variation between the post-test mean scores of peer tutees on Task – 2"** is accepted. Thus, there is no significant difference among peer tutees in Task – 2. Therefore, the above framed null hypothesis H_0 is accepted.

This table demonstrates to us the final condition among the peer tutees for their initial state and Task – 2. From this table, we also conclude that there is significant variance among the groups. It means that Task – 2 Numeral Symbol of tutees with Post – Test stage prevailed significantly increased among the variance of peer tutees.

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Table No. – 1.14
Showing the ANOVA for the mean scores of Task – 2 based on Peer Tutors (Post – Test)

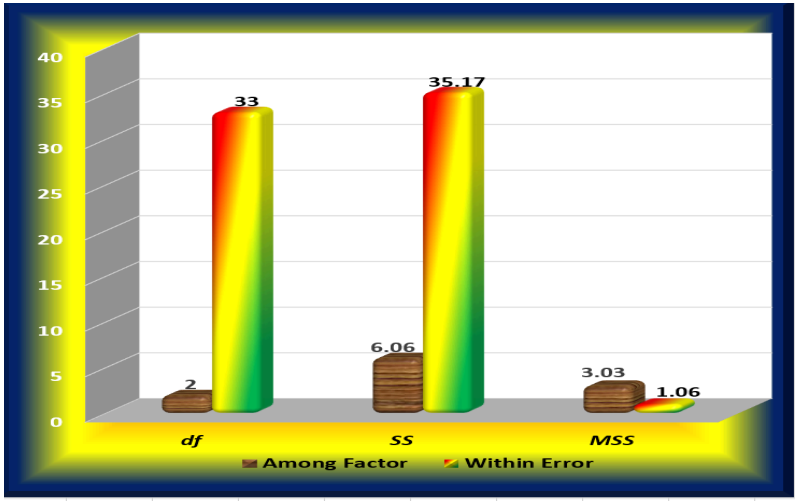

Table No. – 1.15
Paired Sample t-test to see the significance of the achievement of Tutees on Task – 2

Sig.Level - 0.05

	Mean	S.D.	t – value
Pre – Test	21.33	2.083	88
Post – Test	50.67	1.528	P<0.05, df = 2

The above table shows the performance of peer tutees on Task – 2. The mean scores of peer tutees were increased from 21.33 to 50.67 and S.D. decreased from 2.082 to 1.528. The increase in a mean and simultaneous decrease in S.D. indicates the improvement in all tutees as well as the increased homogeneity among tutees. The t – value at the $P < 0.05$, suggests accepting alternative hypothesis H_1 and reject the null hypothesis H_0 i.e. Therefore, the null hypothesis **"There is no significant difference between the pre-test and post-test mean score of peer tutees on Task – 2"** is rejected. There is a significant difference between the Pre-test and Post-test mean scores of peer tutees on Task – 2.

This table compares the mean scores of pre and post-test. From the above discussion, it concludes that the mean scores of post-test are higher than the mean scores of pre-test of peer tutees in Task – 2. Hence,

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we calculated the value of the t-test and it suggests that our null hypothesis is rejected. This also proves that there is a significant difference between the pre and post-test mean scores of peer tutees on Task – 2 oms Numeral Symbol.

Table No. – 1.15
Paired Sample t-test to see the significance of the achievement of Tutees on Task – 2

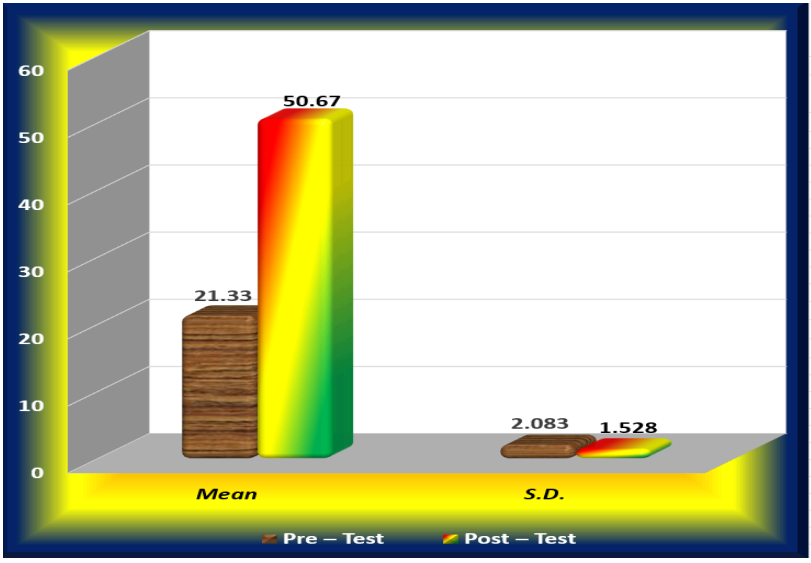

Table No. – 1.16
Paired Sample t-test to see the significance of achievement for both tasks for all Tutees
Paired sample for both tasks for all Tutees. [Task – 1 and Task – 2]
Sig. Level – 0.05

	Mean	S.D.	t – value
Pre – Test	39.99	4.16	61
Post – Test	101	2.1	P<0.05, df = 2

The above table 4.16, gives us the mean and the S.D. of tutees on both task Task – 1 and Task – 2. The mean of the tutees increased from 39.99 to 101 and the S.D. decrease from 1.16 to 2.1. Comparing the S.D. of post-test on Task – 1 and Task – 2 we may see that the mean of Task – 1 represents the group to a greater extent than the mean of Task – 2. This

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shows improvement in the performance of tutees as well as decreased variability between the scores of tutees. The value of t indicates the significant improvement in tutees on Task – 1 and Task – 2. Therefore, the null hypothesis, **"There is no significant difference between the pre-test and post-test mean score of peer tutees on Task – 1 and Task – 2"** is rejected. There is a significant difference between the pre-test and post-test mean scores of peer tutees on Task – 1 and Task – 2.

The above table compares the mean scores and standard deviation of pre-test and post-test in both tasks. Therefore, it can be seen that the mean score of post-test is higher than that of the mean scores of pre-test of peer tutees. The table also signifies that the standard deviation of the pre-test is greater than that of post-test and hence also signifies that there is more increase in pre-test and post-test mean achievement scores of tutees on the Task – 1 counting and giving objects, simultaneously on Task – 2 matching Numeral Symbol with given objects.

Table No. – 1.16
Paired sample for both tasks for all Tutees
[Task – 1 and Task – 2]

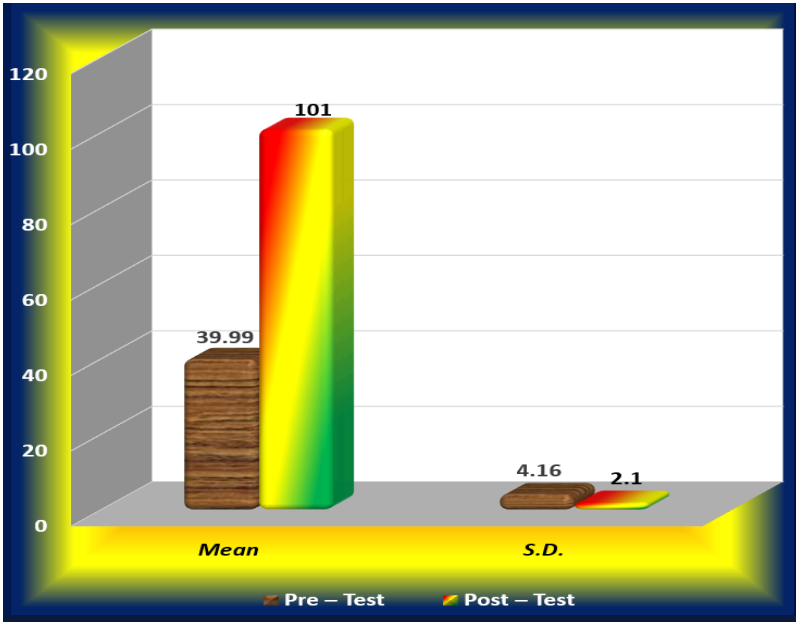

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Table No. – 1.17
Pair comparison on Task – 1
Paired sample of t-test for result for comparison between the achievement of tutees on Task – 1

		Mean	Std. Error Mean	t – value
Pair – 1	Tutees – 1	33.00	17.00000	1.00
	Tutees – 2	34.00	16.00000	
Pair – 2	Tutees – 2	34.00	16.00000	2.00
	Tutees – 3	36.00	15.00000	
Pair – 1	Tutees – 1	33.00	17.00000	1.00
	Tutees – 3	36.00	15.00000	P > 0.05

The above table 1.17, is showing paired sample t-test results between all possible pairs. The mean scores of Tutees – 1 and Tutees – 2 in Pair – 1 are 33.00 and 34.00 respectively. The Std. Error Mean in the same is 17 & 16 respectively. The mean scores of Tutees – 2 and Tutees – 3 in Pair – 2 is 34 and 36 sequentially. The mean scores of Tutees – 1 and Tutees – 3 in Pair – 3 is 33 and 36 respectively. From the above discussion, we can conclude that the t – the value of Pair 1, 2, and 3 are 1.00, 2.00, and 1.00 correspondingly. The calculated value of t of all the pairs is lesser than the tabulated value of t at the level of significant 0.05. The value of t indicates to accept the null hypothesis, **"There is no significant difference between performances of peer tutees with the achievement of number skills of peer tutees on Task – 1**" is accepted.

This table compares the mean scores between pairs sample of all tutees on Task – 1. The values of mean and standard deviation shown in table 4.17 are that the pair were normally distributed and seemed almost equal and the calculated t – value [less than table value] supports the null hypothesis. Based on this evidence, it was shown that the difference between the mean of the three pair groups was not significant and all pair groups were equivalent before the peer tutoring based on the achievement of the tutees. The result showed that the tutees – 3 in Pair – 2 is more effective than the others.

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Table No. – 1.17
Paired sample of t-test for result for comparison between the achievement of tutees on Task – 1

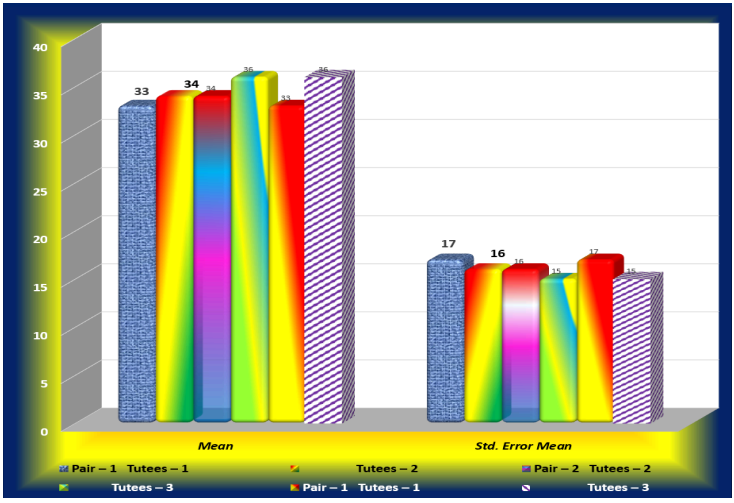

Table No. – 1.18
Pair comparison on Task – 2
Paired sample of t-test for result for comparison between the achievement of tutees on Task – 2

	Mean	Std. Error Mean	t – value
Pair – 1 Tutee – 1	33.5000	9.26013	1
Tutees – 2	35.2500	8.84473	
Pair – 2 Tutees – 2	35.2500	8.84473	1
Tutees – 3	36.7500	8.52814	
Pair – 1 Tutee – 1	33.5000	9.26013	1.00
Tutees – 3	36.7500	8.52814	P > 0.05 df = 1

The above table 1.18, is showing paired sample t-test results between all possible pairs. The mean scores of Tutees – 1 and Tutees – 2 in Pair – 1 are 33.5000 and 35.2500 sequentially. The Std. Error Mean in the same is 9.26013 & 8.84473 respectively. The mean scores of Tutees – 2 and Tutees – 3 in Pair – 2 are 35.2500 and 36.7500 respectively. Simultaneously Std. Error Means in the same is 8.84473 and 8.52814. The mean scores of tutees – 1 and tutees – 3 in Pair – 3 are 33.5000 and

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36.7500 correspondingly. Simultaneously Std. The error means in the same is 9.26013 and 8.52814.

From the above discussion, we can conclude that t – the value of pairs 1, 2, and 3 are 1, 1, and 1 respectively. The calculated value of t all the pairs is lesser than the tabulated value of t at the level of significant 0.05. The value of t – indicates that the null hypothesis, **"There is no significant difference between the performance of peer tutors with the achievement of number skills of peer tutees on Task – 2**" is accepted.

The above table compares the mean scores and standard deviation between the paired sample of all tutees on Task – 2. The performance and achievement of all the all tutees on Task – 2 matching numeral symbol is known from this test. The achievement scores were analyzed in comparison to the treatment condition. The t-test indicated that there is no significant improvement in the performance of all tutees on Task – 2. This result evidences a strong impact of peer tutoring on the achievement of matching numeral symbols of peer tutees.

Table No. – 1.18

Paired sample of t-test for result for comparison between the achievement of tutees on Task – 2

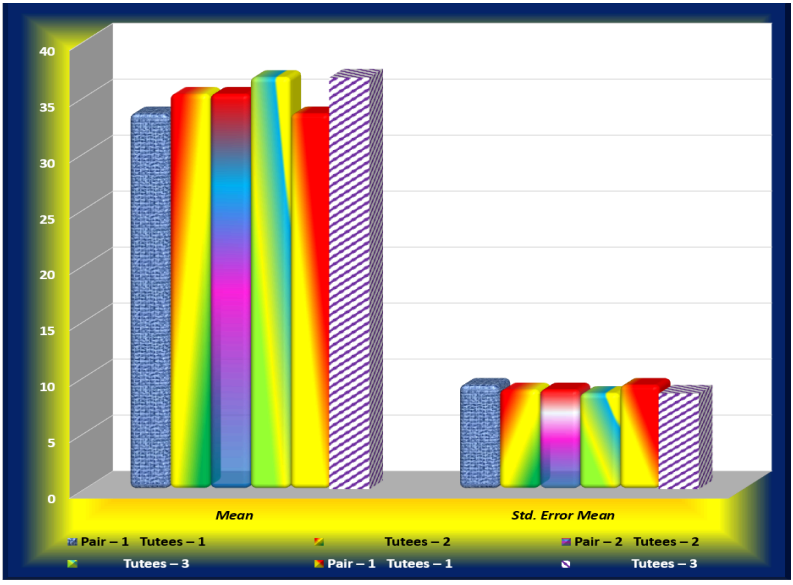

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Table No. – 1.19
Communication Skills Peer Tutees (Pre-test)
Showing the ANOVA for the mean scores of Communication Skills based on Peer Tutees Pre–Test

Sig. Level – 0.05

Source of variation	Df	SS	MSS	F – calculated
Among Factor	2	8.85	4.425	2.98
Within Error	42	62.4	1.48	
TOTAL	44	71.25		

F = (2, 42) = 2.98
df_1 = 2 and df_2 = 42
F at – .05 = 3.22

From table no. – 1.19, it can be concluded that in the Pre-test of Communication Skills, the significant difference of the ANOVA value is calculated. In the calculated ANOVA value, the degree of freedom for variance among the group is found to be 2. It can be also seen from the table that, the sum of squares among groups and the mean sum of the square is 8.85 and 4.425 respectively.

In the same way, the above table also demonstrates that the degree of freedom for variance within the group is found to be 42. The table also reveals that the sum of squares within groups and the mean sum of the square is 62.4 and 1.48 respectively. From above the data, the F-calculated value for the ANOVA test is computed to be 2.98. The F-calculated value is lesser than the F-tabulated or F-critical value at 0.05 significant level. Hence, it is concluded from the above discussion that, there is no significant difference among the pre-test of peer tutors in Communication Skills. Therefore, the null hypothesis, **"There is no significant variation among the pre-test mean scores of peer tutors on Communication Skills"** is accepted. Thus, there is no significant difference among peer tutees in Communication Skills. Therefore, the above framed null hypothesis H_0 is accepted. The above table suggests the findings of the initial condition of peer tutees i.e., where does it exist, and also suggests the status of their baseline. There is no significant variance among the peer tutees. We also observe the initial state of Communication Skills among peer tutees.

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Table No. – 1.19
Showing the ANOVA for the mean scores of Communication Skills based on Peer Tutees Pre–Test

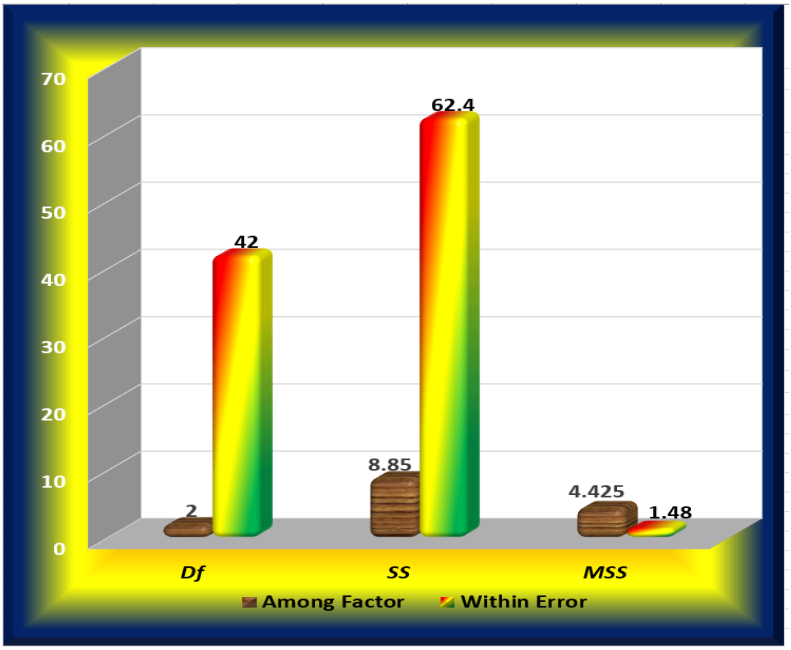

Table No. – 1.20
Communication Skills on Peer Tutees (Post-test)
Showing the ANOVA for the mean scores of Communication Skills based on Peer Tutors Post–Test

Sig. Level – 0.05

Source of variation	df	SS	MSS	F – calculated
Among Factor	2	1.6	0.8	3.33
Within Error	42	10.4	0.24	
TOTAL	44	12		

F = (2, 33) = 3.33

df_1 = 2 and df_2 = 42

F at – .05 = 3.22

From table no. – 1.20, it can be concluded that in the Post-test of Communication Skills, the significant difference of the ANOVA value is

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calculated. In the calculated ANOVA value, the degree of freedom for variance among the group is found to be 2. It can be also seen from the table that, the sum of squares among groups and the mean sum of the square is 1.6 and 0.8 respectively.

In the same way, the above table also demonstrates that the degree of freedom for variance within the group is found to be 42. The table also reveals that the sum of squares within groups and the mean sum of the square is 10.4 and 0.24 respectively. From above the data, the F-calculated value for the ANOVA test is computed to be 3.33. The F-calculated value is greater than the F-tabulated or F-critical value at 0.05 significant level. Hence, it is concluded from the above discussion that, there is a significant difference among the post-test of peer tutees in Communication Skills. Therefore, the null hypothesis, **"There is no significant variation among the post-test mean scores of peer tutees on Communication Skills"** is rejected. Thus, there is no significant difference among peer tutees in Communication Skills. Therefore, the above framed null hypothesis H_0 is rejected. This table demonstrates to us the final condition among the peer tutees for their initial state and Communication Skills. From this table, we also conclude that there is significant variance among the groups. It means that Communication Skills of intellectually disabled tutees with Post – Test stage prevailed significantly increased among the variance of Peet Tutees.

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Table No. – 1.20
Showing the ANOVA for the mean scores of Communication Skills based on Peer Tutors Post–Test

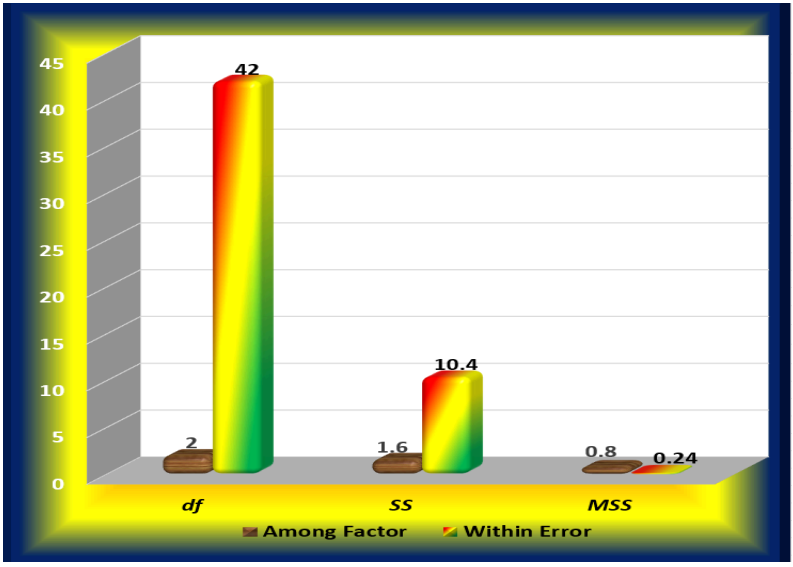

Table No. – 1.21
Paired Sample Statistics of Communication Skills of Peer Tutees

	Mean	S.D.	t – value
Pre – Test	37.66	8.14	7.46
Post – Test	70	3.46	P<0.05, df = 2

The above table shows that the combined mean scores of tutees on the Pre–Test were 37.66 which increased up to 70 and S.D. decreased from 8.14 to 3.46. The increase in mean and decrease in S.D. reveals improvement in all tutees as well as increased homogeneity in the group after intervention. Also, the calculated value of t is greater than the table value of t at the level of significance 0.05 which suggests rejecting null hypothesis H_0 and to accept alternative hypothesis H_1 i.e., there is a significant difference between pre-test and post-test scores of peer tutees on Communication Skills. Therefore, the null hypothesis **"There is no significant difference between the Pre-test and Post-test mean score of peer tutees on Communication Skills"** is rejected. There is a significant

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difference between the Pre – Test, and Post – Test mean scores of Peer Tutees on Communication Skills.

This table compares the mean scores of pre and post-test. From the above discussion, it concludes that the mean scores of pre-test of peer tutees in communication skills. Hence, we calculated the value of the t-test and it suggests that our null hypothesis is rejected. is higher than the mean scores of pre-test of peer tutees in Task – 1. Hence, we calculated the value of the t-test and it suggests that our null hypothesis is rejected. This also proves that there is a significant difference between the pre and post-test mean scores of peer tutees on communication skills.

Table No. – 1.21

Paired Sample Statistics of Communication Skills of Peer Tutees

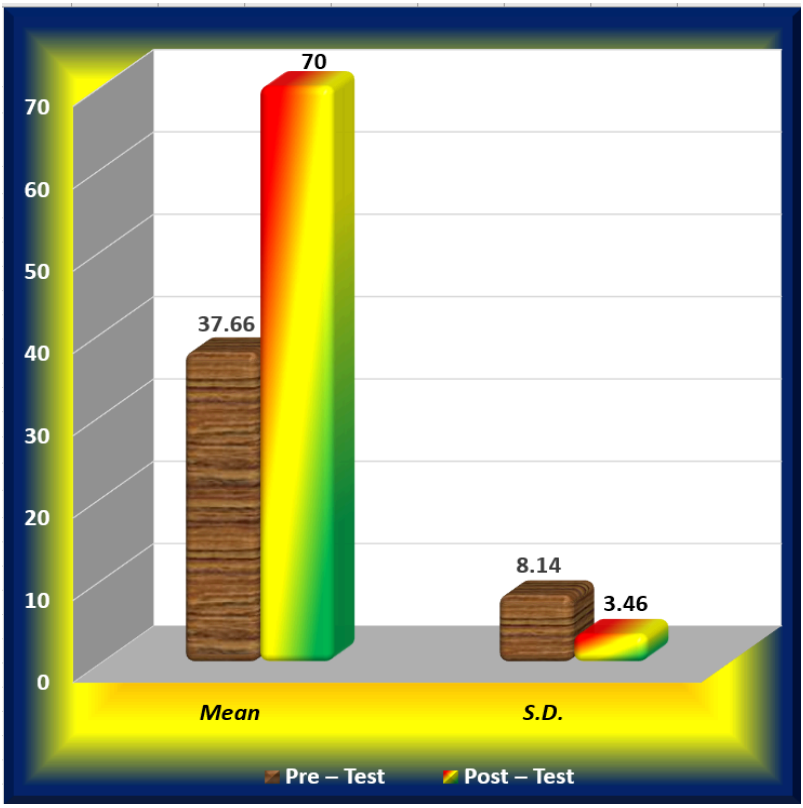

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Table No. – 1.22
Social Skills on Peer Tutees (Pre-test)
Showing the ANOVA for the mean scores of Social Skills based on Peer Tutees Pre–Test

Sig. Level – 0.05

Source of variation	df	SS	MSS	F – calculated
Among Factor	2	4.24	2.12	3.02
Within Error	57	39.95	0.70	
TOTAL	59	44.19		

F = (2, 57) = 3.02

df_1 = 2 and df_2 = 57

F at – .05 = 3.16

From table no. – 1.22, it can be concluded that in the Pre-test of Social Skills, the significant difference of the ANOVA value is calculated. In the calculated ANOVA value, the degree of freedom for variance among the group is found to be 2. It can be also seen from the table that, the sum of squares among groups and the mean sum of the square is 4.24 and 2.12 respectively.

In the same way, the above table also demonstrates that the degree of freedom for variance within the group is found to be 57. The table also reveals that the sum of squares within groups and the mean sum of the square is 39.95 and 0.70 respectively. From above the data, the F-calculated value for the ANOVA test is computed to be 3.02. The F-calculated value is lesser than the F-tabulated or F-critical value at 0.05 significant level. Hence, it is concluded from the above discussion that, there is no significant difference among the pre-test of peer tutors in Social Skills. Therefore, the null hypothesis, **"There is no significant variation among the pre-test mean scores of peer tutees on Social Skills"**is accepted. Therefore, the above framed null hypothesis H_0 is accepted. It reveals that the pre-test scores initially showed the social condition of intellectually disable tutees. The pre-test scores revealed that there is no significant variance among the peer tutees on social skills.

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Table No. – 1.22
Showing the ANOVA for the mean scores of Social Skills based on Peer Tutees (Pre – Test)

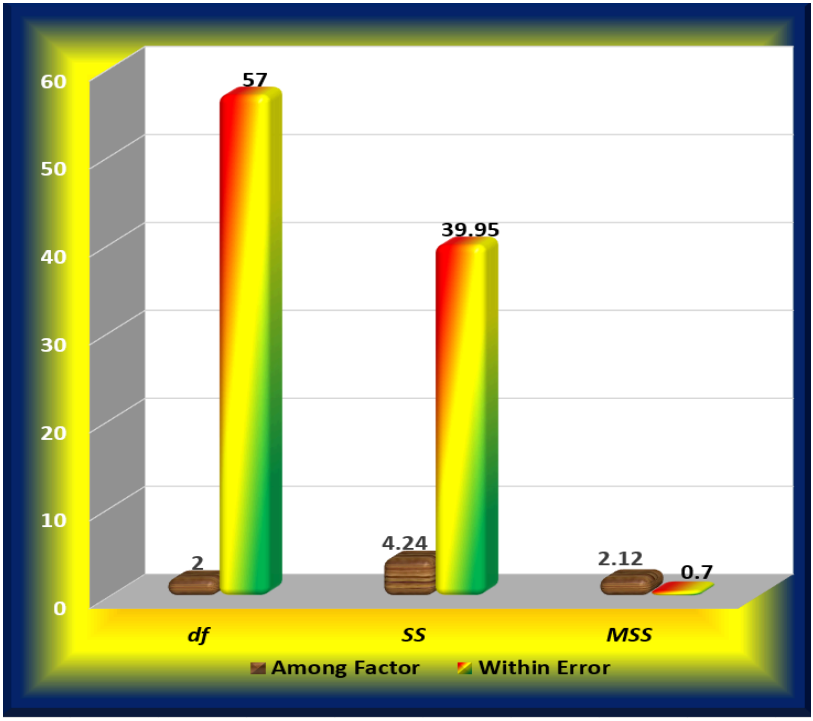

Table No. – 1.23
Social Skills on Peer Tutees (Post-test)
Showing the ANOVA for the mean scores of Social Skills based on Peer Tutees Post–Test

Sig. Level – 0.05

Source of variation	df	SS	MSS	F – calculated
Among Factor	2	0.1	0.05	0.25
Within Error	57	11.5	0.20	
TOTAL	59			

F = (2, 57) = 0.25
df_1 = 2 and df_2 = 57
F at – .05 = 3.16

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From table no. – 1.23, it can be concluded that in the Post-test of Social Skills, the significant difference of the ANOVA value is calculated. In the calculated ANOVA value, the degree of freedom for variance among the group is found to be 2. It can be also seen from the table that, the sum of squares among groups and the mean sum of the square is 0.1 and 0.05 respectively.

In the same way, the above table also demonstrates that the degree of freedom for variance within the group is found to be 57. The table also reveals that the sum of squares within groups and the mean sum of the square is 11.5 and 0.20 respectively. From above the data, the F-calculated value for the ANOVA test is computed to be 0.25. The F-calculated value is lesser than the F-tabulated or F-critical value at 0.05 significant level. Hence, it is concluded from the above discussion that, there is no significant difference among the post-test of peer tutees in Social Skills. Therefore, the null hypothesis, **"There is no significant variation among the post-test mean scores of peer tutees on Social Skills"** is accepted. Thus, there is no significant difference among peer tutees in Social Skills.

Therefore, the above framed null hypothesis H_0 is accepted. This table concludes that there is no significant variance among the groups. It means that social skills of intellectually disabled tutees with post-test stage prevailed significantly increase among the variance of peer tutees. However, they enhanced performance in the posttest which might be the result of peer tutoring. This confirms Vygotsky.

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Table No. – 1.23
Showing the ANOVA for the mean scores of Social Skills based on Peer Tutees (Post – Test)

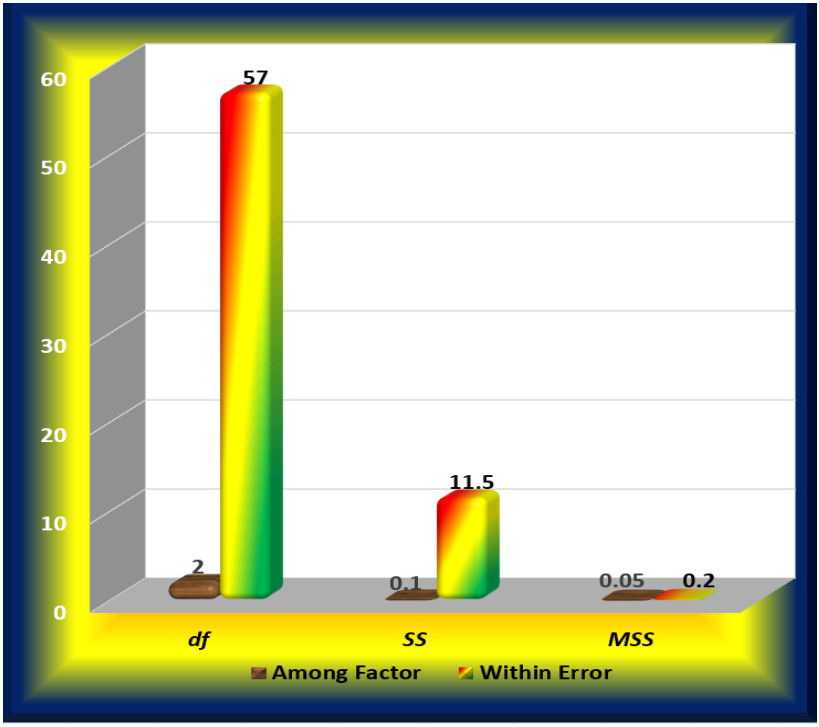

Table No. – 1.24
Paired Sample t-test result of Social Skills of Peer Tutees

	Mean	S.D.	t – value
Pre – Test	47.66	6.50	11.69
Post – Test	96	1	P<0.05, df = 2

The above table shows that the combined mean scores of tutees on the Pre–Test was 47.66 which increased up to 76 and S.D. decreased from 6.50 to 1. The increase in mean and decrease in S.D. reveals improvement in all tutees as well as increased homogeneity in the group after intervention. Also, the calculated value of t is greater than the table value of t at the level of significance 0.05 which suggests rejecting null hypothesis H_0 and to accept alternative hypothesis H_1 i.e., there is a

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significant difference between pre-test and post-test scores of peer tutees on Social Skills. Therefore, the null hypothesis **"There is no significant difference between the Pre-test and Post-test mean score of peer tutees on Social Skills"** is rejected. There is a significant difference between the Pre – Test, and Post – Test mean scores of Peer Tutees on Social Skills.

This table compares the mean scores of pre and post-test. From the above discussion, it concludes that the mean scores of post-test are higher than the mean scores of pre-test of peer tutees in social skills. The greater calculated t – value leads to the rejection of the null hypothesis again (See table 1.24). Based on this evidence it may be interpreted that peer tutoring had a significant effect on the achievement of social skills. This result is similar to the study of Osguthropl and Scruggs (1986), who concluded that these students experience academic and social benefits by functioning either as a tutor or as tutees.

Table No. – 1.24
Paired Sample t-test result of Social Skills of Peer Tutees

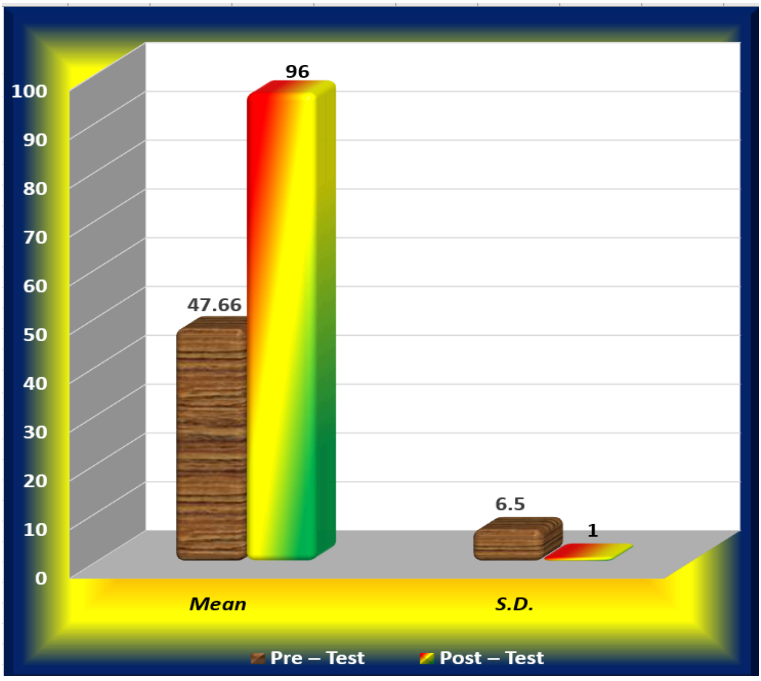

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Table No. – 1.25
Test wise Achievement of All Peer Tutors and Peer Tutees
Comparison of Pre – Test, and Post – Test mean scores of tutees [Test wise]

Task	Pre–Test Mean	Post–Test Mean
Task – 1	18.33	50.33
Task – 2	21.33	50.67

The above table compares the pre-test and post-test mean scores of peer tutees on task – 1 and task – 2 (test wise). The table shows the performance of peer tutees on both tasks. The mean scores of peer tutees were increased from 18.33 (pre-test) to 50.33 (post-test) in task – 1. Similarly, the mean scores of peer tutees also increased from 21.33 (pre-test) to 50.67 (post-test) in task – 2. With the help of the above result, it can be seen that peer tutoring is effective for the development of intellectually disabled children.

Table No. – 1.25
Test wise Achievement of All Peer Tutors and Peer Tutees

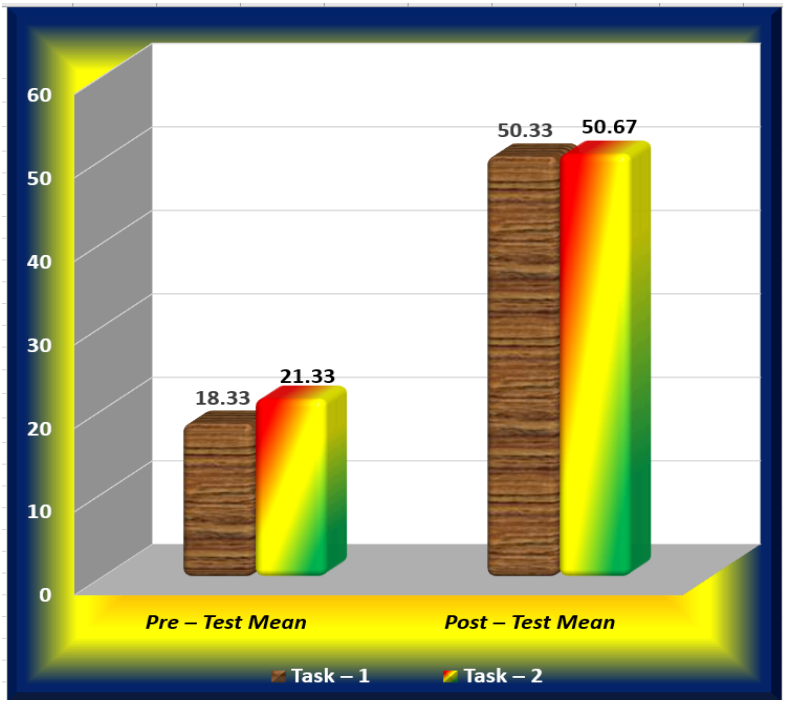

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Table No. – 1.26

Achievement of Tutees – 1 on the Task – 1 and Task – 2 in percentage

Task	Pre – Test Score	Post – Test Score	Difference	Achievement Percentage
Task – 1	18	50	32	177
Task – 2	22	51	29	131

The above table demonstrates us the pre-test and post-test scores of Task – 1 for Tutee – 1 as 18 and 50 respectively. Similarly, the same things were applied on Task – 2 and we got the results as 22 and 51 simultaneously. Hence from the above scores of pre-test and post-test, we calculated the achievement percentage of Task – 1 and Task – 2 for Tutees – 1 as 177% and 131 % consequently. Therefore, from the above table it is quite obvious that the Tutee – 1 achieved more on Task – 1 as compared to Task – 2.

Table No. – 1.26

Achievement of Tutees – 1 on the Task – 1 and Task – 2 in percentage

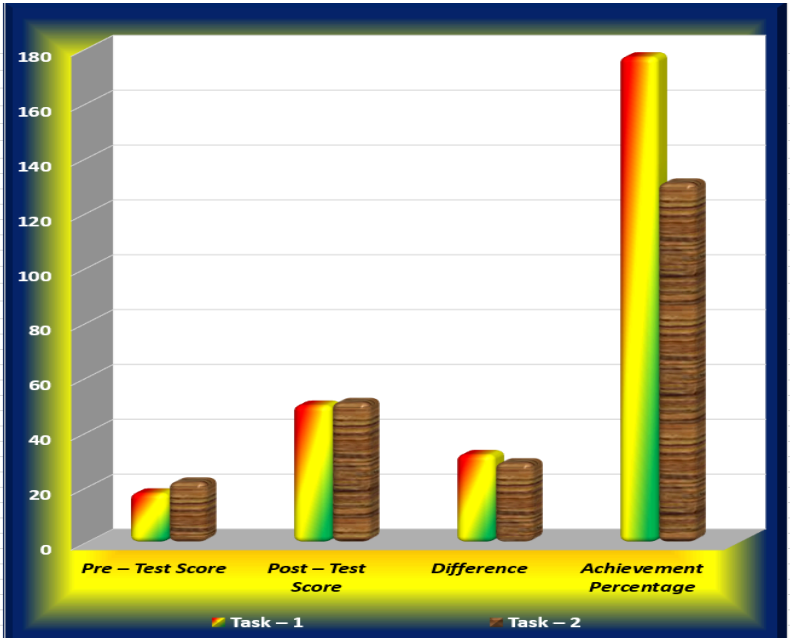

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Table No. – 1.27

Achievement of Tutees – 2 on the Task – 1 and Task – 2 in percentage

Task	Pre – Test Score	Post – Test Score	Difference	Achievement Percentage
Task – 1	16	50	34	212
Task – 2	19	49	30	152

From table no. 1.27, we can study the achievement of Tutees – 2 on both tasks. Tutees – 2 gained 16 and 50, pre-test and post-test scores in Task – 1. Similar to the above way, they also gained 19 and 49 in Task – 2 respectively. Hence, from the above calculations we can determine the achievement percentage of Tutee – 2 on Task – 1 and Task – 2 as 212% and 152% respectively. From the above table, it is clear that Tutee – 2 achieved more on Task – 1 than Task – 2.

Table No. – 1.27

Achievement of Tutees – 2 on the Task – 1 and Task – 2 in percentage

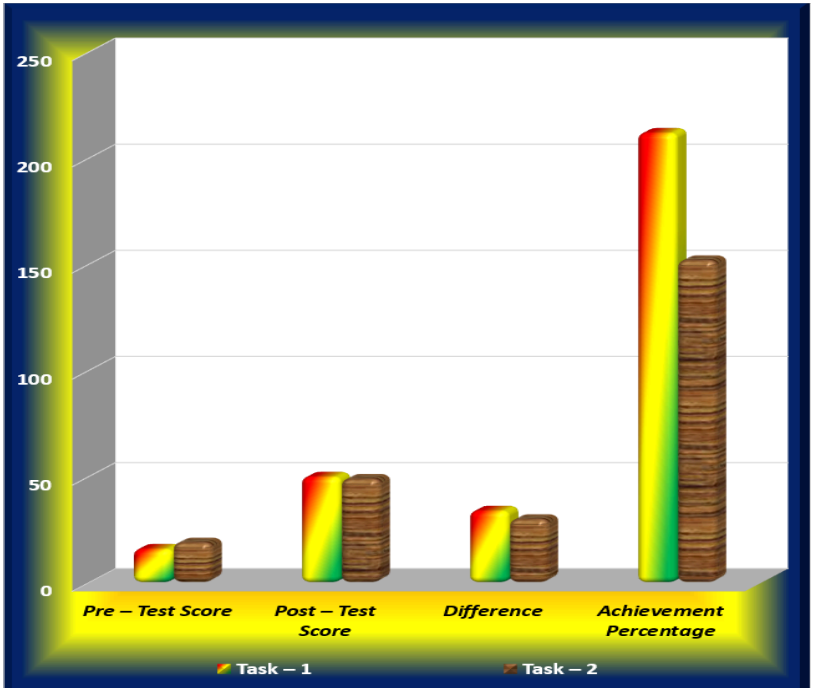

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Table No. – 1.28

Achievement of Tutees – 3 on the Task – 1 and Task – 2 in percentage

Task	Pre – Test Score	Post – Test Score	Difference	Achievement Percentage
Task – 1	21	51	30	142
Task – 2	23	52	29	126

The above table demonstrates us the pre-test and post-test scores of the task – 1 for tutees – 3 as 21 & 51 respectively. Similarly, the same things were applied on task – 2 and we got the results as 23 and 52 simultaneously. Hence from the above scores of pre-test and post-test, we calculated the achievement percentage of task – 1 and task – 2 for tutee – 3 as 172% and 136%. Therefore, the above table clearly shows that the tutee – 3 achieved more on task – 1 than task – 2.

This table reveals that all the tutees achieved more on task – 1 than task – 2. Through these tables, it is also evident that task – 1 was more effective than the others, about the achievement of number skills of tutees.

Table No. – 1.28

Achievement of Tutees – 3 on the Task – 1 and Task – 2 in percentage

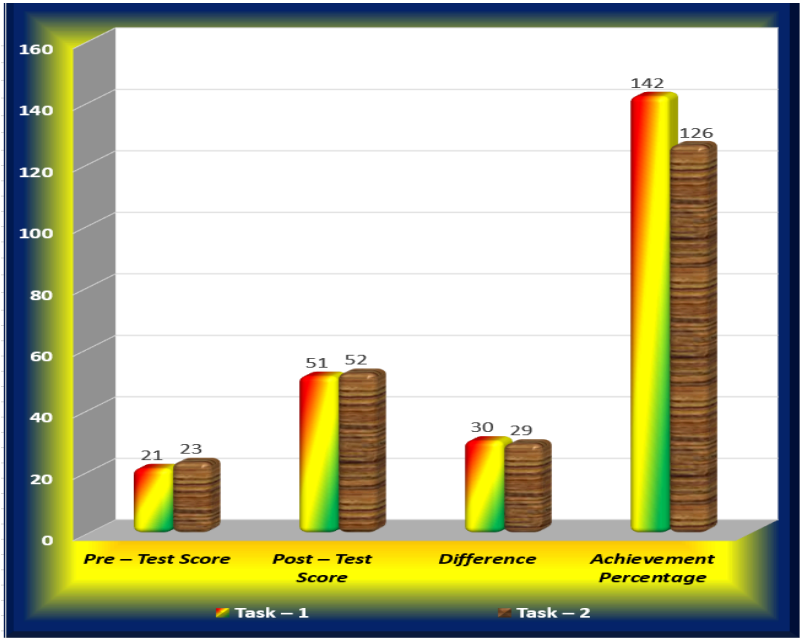

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Table No. – 1.29

Achievement of all Tutees on the Number Skills in percentage

Tutees	Pre – Test Score	Post – Test Score	Difference	Achievement Percentage
P – 1	33	79	46	139.39
P – 2	37	92	55	148.64
P – 3	53	94	41	77.5

The above table shows the achievement scores of all tutees on the CANS – 2. The Number Skill – 2 achievement percentage of all tutees i.e., P.T. – 1, P.T. – 2, and P.T. – 3 was calculated and the result obtained was 139.39%, 148.64%, and 77.35% respectively. Therefore, from the above table, it is quite obvious that the peer tutees – 2 achieved more percentage compared to others.

Table No. – 1.29

Achievement of all Tutees on the Number Skills in percentage

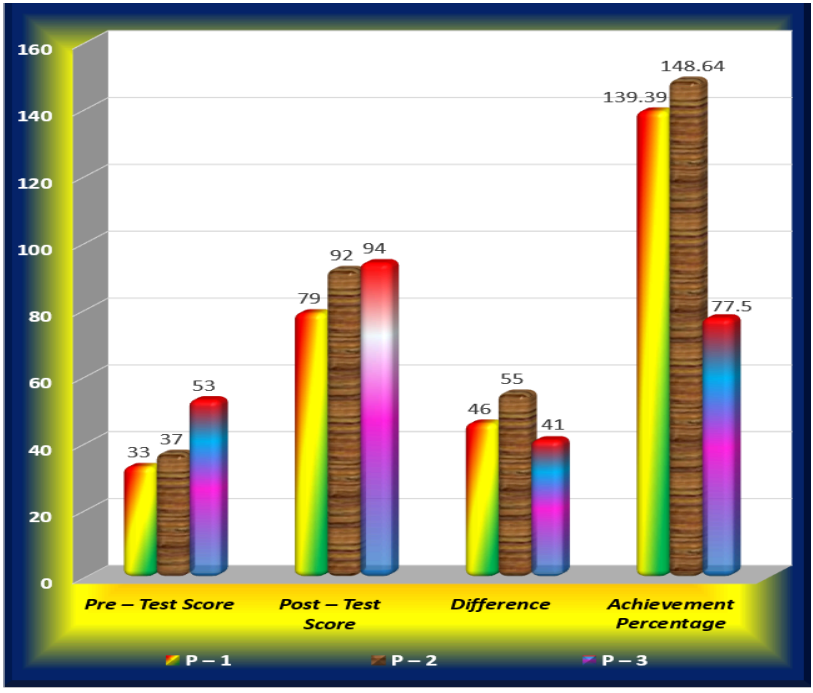

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Table No. – 1.30

Achievement of all Tutees on the Communication Skills in percentage

Tutees	Pre–Test Score	Post–Test Score	Difference	Achievement Percentage
P – 1	47	72	25	53.19
P – 2	34	66	32	94.11
P – 3	32	72	40	125

The above table demonstrates to us the pre and post-test scores of all Tutee's achievements on Communication Skills. The achievement percentage of all tutees i.e., peer tutee – 1, pee tutee – 2, and peer tutee – 3 was calculated by the pre-test and post-test scores and the result gained was 53.19%, 94.11%, and 125% correspondingly. Further, it can be simply seen that out of all peer tutees, P – 3 gained more achievement as compared to the rest. By this result, we can also conclude that with the help of peer tutoring, Communication Skills could be developed in intellectually disabled tutees.

Table No. – 1.30

Achievement of all Tutees on the Communication Skills in percentage

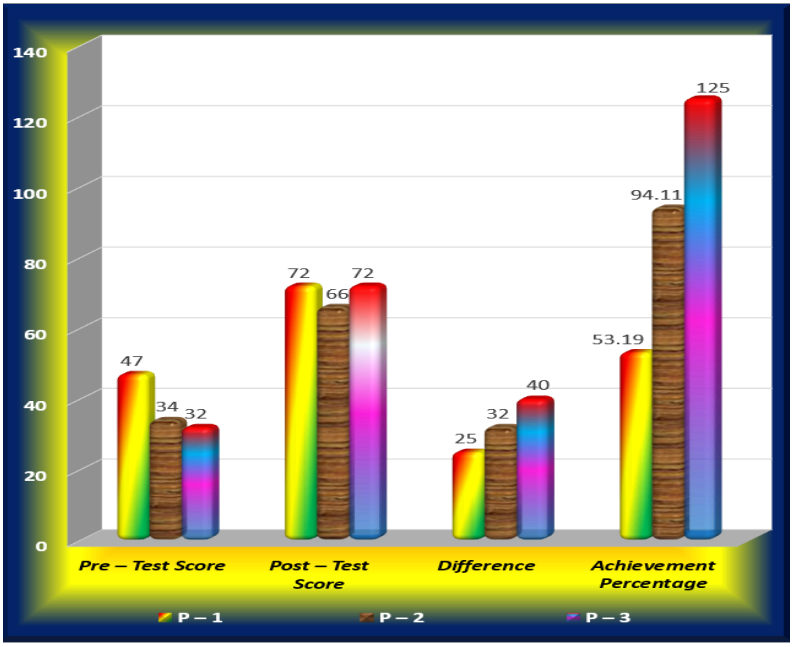

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Table No. – 1.31
Achievement of all Tutees on the Social Skills in percentage

Tutees	Pre – Test Score	Post – Test Score	Difference	Achievement Percentage
P – 1	41	95	54	131.70
P – 2	48	97	49	102.08
P – 3	54	96	42	77.77

The above table demonstrates to us the pre and post-test scores of all Tutee's achievements in Social Skills. The social skill achievement percentage of all tutees i.e., P – 1, P – 2, and P – 3 was calculated by the pre-test and post-test scores and the result obtained was 131.70%, 102.08%, and 77.77% respectively. Further, it can be simply seen that out of all peer tutees, peer tutee – 1 gained more achievement as compared to the rest. Through this result, we can also observe that the social skills of all the peer tutees were improved significantly after participation in the peer tutoring program.

Table No. – 1.31
Achievement of all Tutees on the Social Skills in percentage

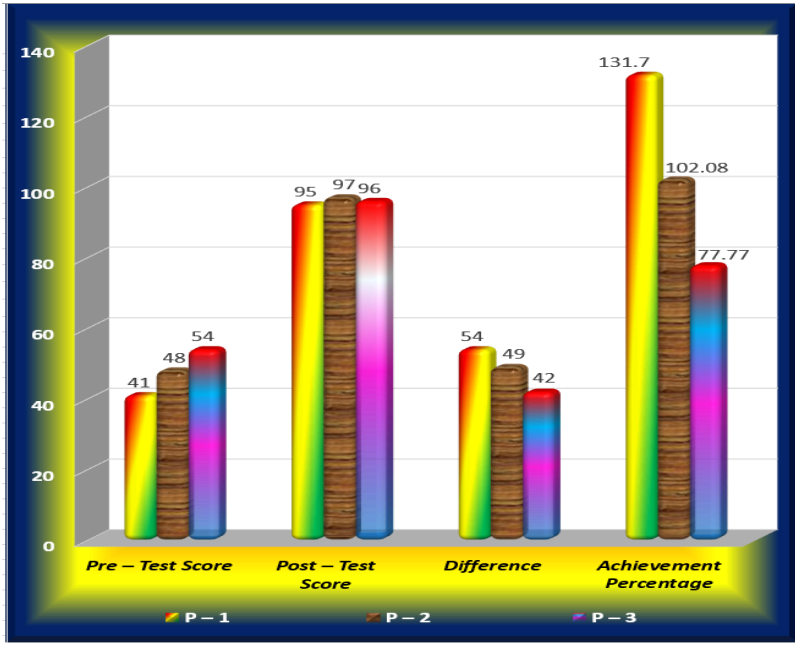

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Table No. – 1.32

Achievement of All Tutors on the Communication Skills in percentage

Tutors	Pre – Test Score	Post – Test Score	Difference	Achievement Percentage
P – 1	46	65	19	41
P – 2	49	63	14	28
P – 3	40	57	17	42

The above table demonstrates us the pre and post-test scores of all Tutors on the achievement of Communication Skills. The achievement percentage of all tutors i.e., P – 1, P – 2, and P – 3 was calculated by the pre-test and post-test scores and the result gained was 41%, 28%, and 42% correspondingly. Further, it can be simply seen that out of all peer tutors, P – 3 gained more achievement as compared to the rest. By this result we can also conclude with the help of peer tutoring, Communication Skills could be developed in intellectually disabled children.

Table No. – 1.32

Achievement of All Tutors on the Communication Skills in percentage

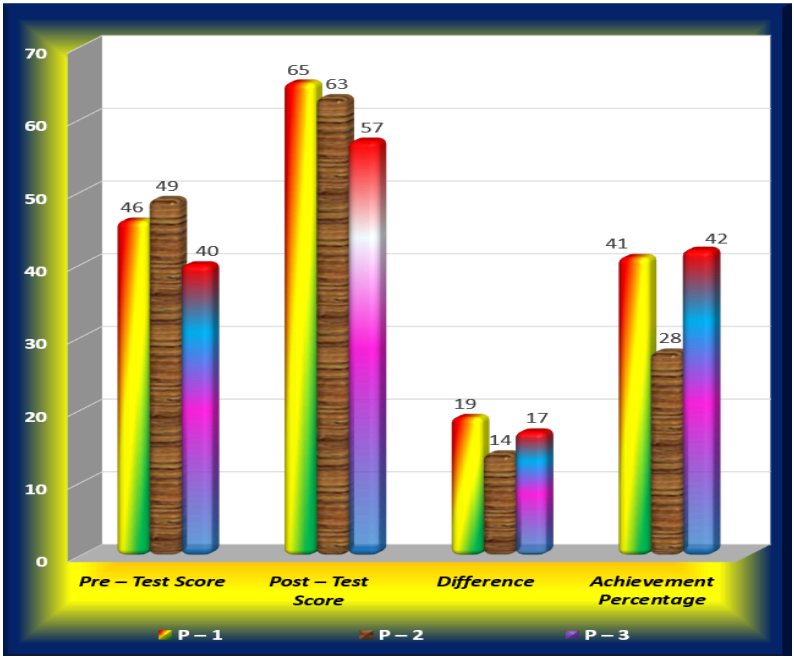

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Table No. – 1.33
Achievement of All Tutors on the Social Skills in percentage

Tutors	Pre – Test Score	Post – Test Score	Difference	Achievement Percentage
P – 1	42	86	44	104
P – 2	43	91	48	111.62
P – 3	50	94	44	88

The above table demonstrates to us the pre and post-test scores of all Tutors on the achievement of Social Skills. The achievement percentage of all tutors i.e., Peer tutor – 1, Peer tutor – 2, and Peer tutor – 3 was calculated by the pre-test and post-test scores and the result obtained was 104%, 111.62%, and 88% respectively. Further, it can be simply seen that out of all peer tutors, peer tutor – 2 gained more achievement as compared to the rest. Through this result, we also observed that the effect of peer tutoring can be used to develop Social Skills in intellectually disabled children. Peer tutors showed a significant gain in their Social Skills.

Table No. – 1.33
Achievement of All Tutors on the Social Skills in percentage

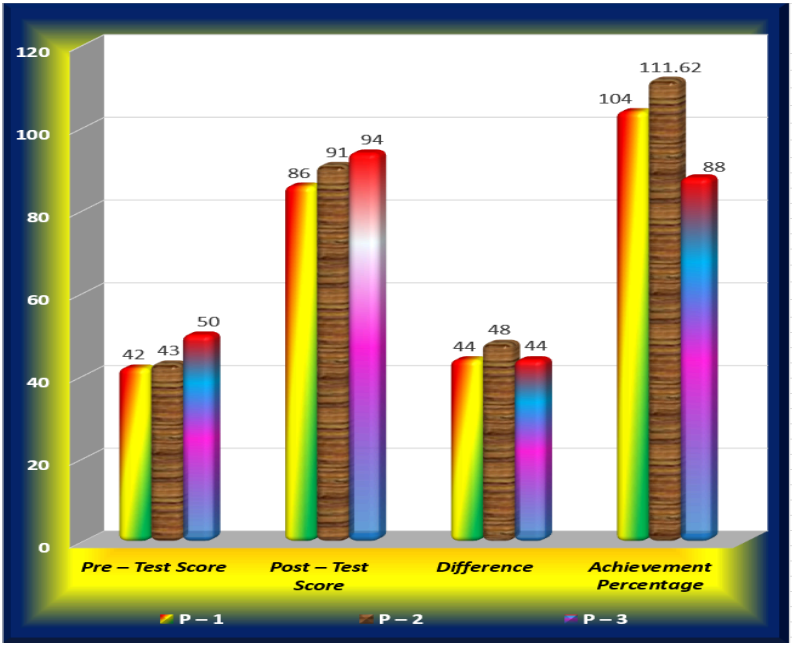

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Table No. – 1.34

Session wise improvement of All Tutees and Tutors

Session wise improvement of Peer Tutees on Task – 1 (Counting and giving objects up to 4)

	Pre-test	S3	S6	S9	S12	S15	S18	S21	Post-test
T – 1	18	20	23	29	33	43	47	50	50
T – 2	16	19	23	32	36	38	43	49	50
T – 3	21	22	25	32	36	40	43	52	51

Table No. – 1.35

Session wise improvement in Peer Tutees on Task – 2 (Matching Numeral Symbol with objects up to 4)

	Pre-test	3rd	6th	9th	12th	15th	18th	21st	Post-test
T – 1	22	20	21	26	30	35	41	49	51
T – 2	19	20	24	28	34	36	43	51	49
T – 3	23	24	27	32	37	40	49	50	52

Table No. – 1.36

Table showing session wise improvement on CANS – 2 of Peer Tutees

	Pre-test	S3	S6	S9	S12	S15	S18	S21	Post-test
T – 1	33	42	48	54	64	68	74	79	79
T – 2	37	44	53	56	66	72	77	80	92
T – 3	53	50	58	66	71	77	82	83	94

Table No. – 1.37

Table showing session wise improvement on Communication Skills of Peer Tutees

	Pre-test	S3	S6	S9	S12	S15	S18	S21	Post-test
T – 1	47	50	52	54	60	63	65	67	72
T – 2	34	36	38	43	48	52	54	58	66
T – 3	32	33	40	44	48	58	58	61	72

ISBN : 978-93-93166-68-5

Table No. – 1.38

Table showing session wise improvement on Social Skills of Peer Tutees

	Pre-test	S3	S6	S9	S12	S15	S18	S21	Post-test
T – 1	41	49	51	60	69	77	86	91	95
T – 2	48	48	55	59	65	72	77	86	97
T – 3	54	54	56	61	67	70	78	85	96

Table No. – 1.39

Table showing session wise improvement on Communication Skills of Peer Tutors

	Pre-test	S3	S6	S9	S12	S15	S18	S21	Post-test
P – 1	46	49	49	49	53	57	59	61	65
P – 2	49	48	50	53	54	55	57	58	63
P – 3	40	40	40	44	47	47	49	50	57

Table No. – 1.40

Table showing session wise improvement on Social Skills of Peer Tutors

	Pre-test	S3	S6	S9	S12	S15	S18	S21	Post-test
P – 1	42	45	46	58	60	66	78	83	86
P – 2	43	47	47	53	64	73	80	88	91
P – 3	50	50	50	56	63	66	72	85	94

ISBN : 978-93-93166-68-5

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ISBN : 978-93-93166-68-5

Chapter - 2

Educational Implication And Suggestions

2.1 Introduction

The previous chapter has been devoted to the analysis and interpretation of the data. The present study was concerned with the effect of peer tutoring on the achievement of number skills among children with intellectual disabilities at the primary level. The analysis has yielded some significant findings pertaining to the effect of peer tutoring on intellectually disabled children.

The tests that were applied on the intellectually disabled children are:

1. Number skills
2. Communication skills
3. Social skills

The finding, conclusions, education, implication, and suggestions for further book have been systematical, delineated in this chapter.

2.2 Major Findings

Major findings evolved from the study are presented in the following heads:

2.2.1 Findings pertaining to the analysis and interpretation of the data There is no significant variation among the pre-test mean scores of peer tutors on communication skills.

The comparison of the pre-test scores of peer tutors using ANOVA revealed that there is no significant variation among the pre-test mean score of peer tutors on communication skills, we observed the initial state of communication skills among peer tutors and the status of their baseline.

2.2.2 Findings pertaining to the analysis and interpretation of the data There is no significant variation among the post-test mean score of peer tutors on communication skills.

The comparison of the post-test scores of peer tutors using ANOVA revealed that there is no significant variation among the post-test mean score of peer tutors on communication skills. It means that the communication skills of intellectually disabled tutors with post-test stage significantly increased among the variance of peer tutors.

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2.2.3 Findings pertaining to the analysis and interpretation of the data There is no significant difference between the pre-test and post-test mean scores of peer tutors on communication skills.

The comparison of the pre-test and post-test scores of peer tutors using t-test revealed that there is a significant difference between the pre-test and post-test mean scores of peer tutors on communication skills. It can be calculated that the scores of the post-test are greater than that of the pre-test, so there is a significant improvement in the communication skills of peer tutors.

2.2.4 Findings pertaining to the analysis and interpretation of the data There is no significant variation among the pre-test mean scores of peer tutors on social skills.

The comparison of the pre-test scores of peer tutors using ANOVA revealed that there is no significant variation among the pre-test mean score of peer tutors on social skills and baseline condition among the peer tutors for their initial stage and social skills.

2.2.5 Findings pertaining to the analysis and interpretation of the data of There is no significant variation among the post-test mean score of peer tutors on social skills

The comparison of the post-test scores of peer tutors using ANOVA revealed that there is no significant variation among the post-test mean score of peer tutors on social skills. It means that the social skills of intellectually disabled tutors with post-test stage prevailed significantly increased among the variance of peer tutors.

2.2.6 Findings pertaining to the analysis and interpretation of the data There is no significant difference between the pre-test and post-test mean scores of peer tutors on social skills.

The comparison of the pre-test and post-test scores of peer tutors using t-test revealed thatthere is a significant difference between the pre-test and post-test mean scores of peer tutors on social skills. It concluded that the mean score of post-tests is higher than the mean scores of pre-tests of peer tutors in social skills. This study signifies that the social skills of all the peer tutors were improved significantly after participating in the peer tutoring program.

2.2.7 Findings pertaining to the analysis and interpretation of the data of There is no significant variation among the pre-test mean score of peer tutees on number skills -2.

The comparison of the pre-test scores of peer tutees using ANOVA revealed that there is significant variation among the pre-test mean score of peer tutees on number skills - 2 and findings of the initial condition of peer tutees i. e., where does it exist and also suggest the status of their baseline.

2.2. 8 Findings pertaining to the analysis and interpretation of the data of There is no significant variation among the post-test mean score of peer tutees on number skills -2.

The comparison of the post-test scores of peer tutees using ANOVA revealed that there is no significant variation among the post-test mean score of peer tutees on number skills -2. Tutees showed a significant gain in number skills – 2. Tutees showed a significant gain in number skills as a result of peer tutoring.

2.2. 9 Findings pertaining to the analysis and interpretation of the data of There is no significant difference between the pre-test and post-test mean scores of peer tutees on number skills -2.

The comparison of the pre-test and post-test scores of peer tutees using t-test revealed thatthere is no significant difference between the pre-test and post-test mean score of peer tutees on number skills -2. It concludes that the mean scores of the post-test are higher than the mean scores of pre-test of peer tutees in Number Skills – 2. There is a significant improvement in the performance of tutees on Number Skills – 2.

2.2.10 Findings pertaining to the analysis and interpretation of the data of There is no significant variation among the pre-test mean score of peer tutees on task-1

The comparison of the pre-test scores of peer tutees using ANOVA revealed that there is no significant variation among the pre-test mean scores of peer tutees on task-1. It exists and also suggests the status of their baseline. We also observe the initial state of Task – 1 among peer tutees.

2.2.11 Findings pertaining to the analysis and interpretation of the data of There is no significant variation among the post-test mean score of peer tutees on task-1

The comparison of the post-test scores of peer tutees using ANOVA revealed that there is significant variation among the post-test

mean score of peer tutees on task-1. It can be concluded that the post-test is superior to the pre-test mean score of peer tutees on task -1.

2.2. 12 Findings pertaining to the analysis and interpretation of the data of There is no significant difference between the pre-test and post-test mean scores of peer tutees on task – 1

The comparison of the pre-test and post-test scores of peer tutees using t-test revealed thatthere is a significant difference between the pre-test and post-test mean score of peer tutees on task – 1. It concludes that the mean score of post-test is higher than the mean scores of pre-test of peer tutees in task – 1. Hence, we calculated the value of the t-test and it suggests that our null hypothesis is rejected. This also proves that there is a significant difference between the pre and post-test mean scores of peer tutees on task – 1.

2.2.13 Findings pertaining to the analysis and interpretation of the data of There is no significant variation among the pre-test mean score of peer tutees on task-2

The comparison of the pre-test scores of peer tutees using ANOVA revealed that there is no significant variation among the pre-test mean scores of peer tutees on task-2. Thus, it can be tentatively interpreted that peer tutoring is more effective for peer tutees on task – 2.

2.2.14 Findings pertaining to the analysis and interpretation of the data of There is no significant variation among the post-test mean score of peer tutees on task - 2

The comparison of the post-test scores of peer tutees using ANOVA revealed that there is significant variation among the post-test mean score of peer tutees on task – 2. It concludes that there is no significant variance among the groups. It means that task – 2 numeral symbols of tutees with post-test stage prevailed significantly increased among the variance of peer tutees.

2.2. 15 Findings pertaining to the analysis and interpretation of the data of There is no significant difference between the pre-test and post-test mean scores of peer tutees on task -2

The comparison of the pre-test and post-test scores of peer tutees using t-test revealed that there is a significant difference between the pre-test and post-test mean scores of peer tutees on task -2. We can observe that the mean scores of post-tests are higher than the mean scores of pre-tests of peer tutees in task 2. It suggests that our null hypothesis is

rejected. This also proves that peer tutoring induces an effective skill for intellectually disabled children. Based on post-test scores of peer tutees on task-2 (numeral symbols), we analyze that peer tutoring is more effective.

2.2. 16 Findings pertaining to the analysis and interpretation of the data of There is no significant difference between the pre-test and post-test mean score of peer tutees on task-1 and task 2

The comparison of the pre-test and post-test scores of peer tutees using t-test revealed that there is a significant difference between the pre-test and post-test mean scores of peer tutees on task-1 and task 2. It can be observed that the mean scores of post-tests are higher than that of the mean scores of pre-tests of all peer tutees. Hence, it also signifies that there is more increase in pre-test and post-test mean achievement scores of tutees on task-1 (counting and giving objects), simultaneously on task-2 (matching numeral symbol with given objects).

2.2. 17 Findings of the analysis and interpretation of the data of There is no significant difference between peer tutors with the achievement of number skills of peer tutees on task -1.

The comparison between all the three pairs of peer tutees using t-test revealed thatthere is no significant difference between peer tutors with the achievement of number skills of peer tutees on task -1. It was shown that the difference between the mean of the three pairs groups was not significant and all pair groups were equivalent before the peer tutoring based on the achievement of the tutees the result showed that the tutees – 3 in pair – 2 more effective than the others.

2.2. 18 Findings of the analysis and interpretation of the data of There is no significant difference between peer tutors with the achievement of number skills of peer tutees on task -2.

The comparison between all the three pairs of peer tutees using t-test revealed that there is no significant difference between peer tutors with the achievement of number skills of peer tutees on task -2. The performance and achievement of all tutees on task-2, “matching numeral symbol” is known from this test. The achievement scores were analyzed in comparison to the treatment condition. The t-test indicates that there is no significant improvement in the performance of all tutees on task-2. The result evidences the strong impact of peer tutoring on the achievement of matching numeral symbols of peer tutees.

2.2. 19 Findings pertaining to the analysis and interpretation of the data of There is no significant variation among the pre-test mean score of peer tutees on communication skills.

The comparison of the pre-test scores of peer tutees using ANOVA revealed that there is no significant variation among the pre-test mean scores of peer tutees on communication skills. The initial condition of peer tutees i.e., where does it exist and also suggests the status of their baseline. we observed the initial state of communication skills among peer tutees and the status of their baseline.

2.2. 20 Findings pertaining to the analysis and interpretation of the data of There is no significant variation among the post-test mean score of peer tutees on communication skills

The comparison of the post-test scores of peer tutees using ANOVA revealed that there is significant variation among the post-test mean score of peer tutees on communication skills. We conclude that there is significant variance among the groups. It means that communication skills of intellectually disabled tutees with post-test stage prevailed significantly increase among the variance of peer tutees.

2.2. 21 Findings pertaining to the analysis and interpretation of the data of There is no significant difference between the pre-test and post-test mean score of peer tutees on communication skills.

The comparison of the pre-test and post-test scores of peer tutees using t-test revealed that there is no significant difference between the pre-test and post-test mean scores of peer tutees on communication skills. The result proved that there is no significant difference between the pre-test and post-test mean scores of peer tutees on communication skills. The improvement in communication skills mostly takes place through peer interaction modelling and imitation which is being given by Bandura in his theory of social learning.

2.2. 22 Findings pertaining to the analysis and interpretation of the data of There is no significant variation among the pre-test mean score of peer tutees on social skills.

The comparison of the pre-test scores of peer tutees using ANOVA revealed that there is no significant variation among the pre-test mean scores of peer tutees on social skills. It reveals that the pre-test scores initially showed the social condition of intellectually disable tutees.

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2.2. 23 Findings pertaining to the analysis and interpretation of the data of There is no significant variation among the post-test mean score of peer tutees on social skills.

The comparison of the post-test scores of peer tutees using ANOVA revealed that there is no significant variation among the post-test mean score of peer tutees on social skills. It means that social skills of intellectually disable tutees with post-test stage prevailed a significant increase among the variance of peer tutees ., however, they enhanced performance in the post-test which might be the result of peer tutoring. This confirms Vigotsky.

2.2. 24 Findings pertaining to the analysis and interpretation of the data of There is no significant difference between the pre-test and post-test mean score of peer tutees on social skills.

The comparison of the pre-test and post-test scores of peer tutees using t-test revealed that there is a significant difference between the pre-test and post-test mean scores of peer tutees on social skills. It concludes that the mean scores of pre-test of peer tutees in social skills. Based on this evidence it may be interpreted that peer tutoring had a significant effect on the achievement of social skills. this result is similar to the study of Osguthrope and Scruggs (1986), who concluded that these students experience academic and social benefits by functioning either as tutees.

2.3 Implication And Recommendation

The present study was concerned with the effect of peer tutoring on the achievement of number skills among children with intellectual disabilities at the primary level. The beauty of the study is that the study considered children with intellectual disable as tutors. Performance of students with intellectual disability on number skills in this study indicated that Peer Tutoring procedure is effective in the case of children with intellectual disable served as peer tutors. Also, the results strongly suggest that students with intellectual disable can increase their correct response on number skills when peer tutoring is provided. The present study has several positive findings which have a direct implication to classroom teachers in teaching children with intellectual disable. The major findings of the study are:

- **Significant improvement in social skills of the tutors:** The booker found in the study that the social skills of the all-peer tutors were improved significantly after participation in the peer tutoring program.

This result is similar to the study of Osguthrope and Scruggs (1986), who concluded from major review and analysis that even special education students can function as tutors if they are trained and supervised properly and that these students experience academic and social benefits by functioning either as a tutor or as tutee. Results of the present study indicated that, though intervention program challenges the aspects of social behavior had a positive influence on peer acceptance of intellectually disabled children. Thus, it can be inferred that from the time of enrolment, if intellectually disabled children are provided with opportunities and exposer to modify and refine their behavior, it can foster a cordial and positive peer relationship between them.

- **Improved communication skills of the tutors:** It is also being observed that not significant but, tutors improved their communication skills after the peer tutoring program. It may be contributed by more time to be suspended in the peer group because the improvement in communication skills mostly takes place through peer interaction modelling and imitation which is being given by Bandura in his theory of social learning.
- **Developed leadership qualities:** It is being observed by the booker during the experiment that playing the role of a teacher; tutors developed a sense of leadership and responsibility. All tutors were noted for their improved handling abilities of the children, their increased social relation with the classroom teacher as well as their randomly assigned tutees.
- **Applying innovative ideas:** The booker also observed that while teaching peer tutors were able to apply some innovative ideas. One day the booker told the tutors to teach their students their ideas. The result was an amazing one. Tutors started to teach their students with the help of counting chairs in the room: tables in the room, fans in the room, etc.
- **Punctuality:** Tutors were given the responsibility to come with their assigned tutees at 11 a.m. at the spl. education lab. The booker saw that during whole tutoring sessions all tutors came at the said time with their assigned tutees. This may be because of playing the role of the teacher: a responsible person.
- **Develop self-confidence:** Children with intellectual disabilities often experience frustration and failure in their academics. Peer tutoring helps them to reduce their academic anxiety to a great extent as they come across frequent success. Also, learning becomes fun when it is

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done through games and activities. This will turn help to develop their self-confidence and self-reliance.

- **Vocational Training:** The purpose of special education is to make children with intellectual disabilities self-dependent. This is possible only when children with intellectual disabilities become economically independent. We may use peer tutors as a human resource in providing vocational training to children with intellectual disable.
- Tutees showed a significant gain in number skills as a result of peer tutoring.
- Peer tutors showed a significant gain in their social skills.
- Although tutors did not show a significant gain in communication skills, they sowed the strong impact of peer tutoring on their communication skills.
- Peer tutors showed interest in participating in tutoring dyads.
- Tutees showed interest in participating in tutoring dyads.
- Tutors showed increased ability to handle their junior students.

The findings of the study reveal that peer tutoring may be an effective method to teach several skills to children with Intellectual disabilities even when the tutors are the elder children with Intellectual disabilities and tutees are their less able peers with Intellectual disabilities. The results of the study indicate that children with Intellectual disabilities attending the prevocational level can be effective tutors of the students with Intellectual disabilities attending the primary level. This result is consistent with the study of Hooper H. and Bowler D.M. (1991) in which students with intellectual disability effectively taught the manual signs to their younger students' intellectual disability and with the study of Koury M. and Browder D.M. in which children with intellectual disability effectively taught sight words to their juniors' students with intellectual disability.

The establishment of a peer tutoring program for children with an intellectual disability appears to be an effective way to assist their learning while permitting their teacher time to work with other students and/or to conduct other classroom activities. Based on the results of this study, the educational, social, and economic benefits of a peer tutoring program with students who have intellectual disability justify the training and in-service necessary to set up an effective program and indicate that the teaching of beginning skills in mathematics need not be the responsibility of teachers only. The findings of the study support the efficacy of peer tutoring programs for and by students with intellectual disabilities. Additional empirical data are needed, however, concerning the use of tutoring programs with students with intellectual disabilities with varying levels and in other academic skill areas.

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2.4 Suggestion for Further book

Booker studies on the Effect of Peer Tutoring are found in few numbers, especially in India. Even though the awareness on Effect of Peer Tutoring among teacher and parents are reaching new heights, the measures to minimize it are almost unknown. The present study would pave a path for further studies in the area of Peer Tutoring. Although the present study indicated the effectiveness of peer tutoring on the achievement of number skills among children with intellectual disable but further book may be conducted:

- The proposed results indicate that peer tutoring may be effective in teaching the number concept to intellectually disabled children.
- Senior intellectually disabled students may be able to teach effectively and efficiently to their younger intellectually disabled students.
- Peer tutoring provides opportunities to develop communication and social skills in intellectually disabled children, and it's furthermore, probably can develop other skills as well in the future.
- In the special school, where normal students are rarely available for the implementation of the peer tutoring program, in such cases, the peer tutoring program may be implemented by utilizing senior children with intellectual disable as peer tutors.
- In inclusive settings, tutoring by students with intellectual disabilities may be helpful in changing the attitudes towards the capabilities of children with intellectual disabilities.
- It may be beneficial also in teaching functional academics to teach children with intellectual disabilities.
- Implementing a peer tutoring program will always be fruitful for the special educators because their responsibility is being shared by these tutors so that the special educators may concentrate their attention on children with severe problems.
- The present study was conducted on students in the Kota district of Rajasthan State. The related study can also be conducted in different districts of the state or country.
- The number of skills of peer tutors may be measured by a large sample size with the help of the generalization of the results.
- Likewise, in the present study, other studies may also be conducted with the different levels of intellectually disabled children with different age groups.
- Studies can be conducted to find out the effectiveness of peer tutoring on the academic achievement of intellectually disabled students with different learning styles.
- Further book may be conducted with different formats of peer tutoring.

- The present study compared the pre-test and post-test and in the same way, it may also be compared with the other methods of teaching by another booker.
- A review of related literature indicated the lack of bookes on the effect of peer tutoring, especially in India. Hence, a book study can be conducted on peer tutors in relation to the achievement of number skills of peer tutors and tutees. In the same way, other bookers can also implement the related book in the future.
- The present findings may be replicated with the other large samples of students with intellectual disabilities. It would be also seen that prudent to examine the effect of peer tutoring in another area of academic achievement when the tutors, as well as the tutees, are children with intellectual disabilities.
- The present study focuses on the academic achievement of children with intellectual disabilities at the primary level. The above study can also be booked on the academic achievement of children with intellectual disability at the secondary level.
- The impact of remedial behavior modification techniques for learning disabled children with emotional problems can also be explored.
- The current prevalence rate of intellectual disability is considered to be indefinite. The prevalence rate of intellectual disability in Rajasthan is further vague. A study can be conducted to find out the prevalence of intellectual disability in Rajasthan.
- The effect of peer tutoring on intellectually disabled children of age group 7-11 years was constructed and standardized in the present study. Similarly, the effect of peer tutoring on intellectually disabled children at the secondary level can be constructed and validated.
- By using the effect of peer tutoring, other bookers can focus on the effect of peer tutors in academic achievement not only on a single intellectual disability but also focuses on multiple intellectual disabilities.
- With different approaches to peer tutoring
- The proposed activities and outcomes of book can be increased to other subjects by implementing e. g. in English, Science, Social Science, etc. More activities and book can be introduced in the area of intellectually disabled children to ease their life comfortably and sophisticatedly.
- Peer tutoring may be included in the daily life of intellectually disabled children in which the school teachers, parents, and peers can play a major role in the activities of the children, and thereby peer tutoring can enhance their academic achievement.

ISBN : 978-93-93166-68-5

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ISBN : 978-93-93166-68-5

Chapter – 3
Summary Of The Book

3.1 Introduction

The old saying that there is nothing new under the sun is most surely true of peer tutoring. The concept of children teaching children is not new and had been happening throughout history. Peers and pass-age tutoring have probably been part of human life for the reason that hunter-gatherer length. As Jenkins and Jenkins write- "Tutorial training dad and mom teaching their offspring a way to make a fire and to seek and youngsters instructing more youthful siblings approximately fit to be eaten berries and roots; changed into probably the first pedagogy some of the primitive societies." Wagner on the other hand lines the historic origin of peer tutoring in western civilization back to Greece in the first century of A.D. And thru Rome and Germany and different European locales and sooner or later America.

A far again as historical Greece, teachers made use of peer tutoring. Many teachers would have used one form or the other form of the peer tutoring strategy in their classrooms to ease the strain of a large number of students. Aristotle is said to have used student leaders, known as archons, to help him; and the Romans, adapting many of the educational practices of the Greeks, used older pupils to teach and test younger students. In the 1500s, Sturn and Trotzendorf used peer tutors. Sturn did not record why he used peer tutors but Trotzendorf wrote that he taught the older pupils who then taught younger ones because it was too expensive to employ more teachers. Towards the end of the 18h century, peer tutoring was systematically introduced by Andrew Bell in 1789(Goodlad and Hirst, 1989, Hornby, G., Atkinson, M. and Howard, J., 2004), for the first time in the charity school of the orphaned boys of soldiers at Egmore, in Madras (India). The children in the school taught their peers writing alphabets using sand trays, which was rejected by the school teachers in the school. The success of the experiment made Andrew Bell perceive his peers as an instructional resource in educational settings.

Following the work of Andrew Bell Joseph Lancaster utilized peer tutoring to provide education to 350 economically backward children in London, discovering that both pupils and teachers benefited from this approach (Adler, 1989). In all the above-mentioned situations, peer tutoring was a financial and practical expedient rather than educationally-based

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strategy. Its value as an educational device became apparent through its use. Peer tutoring was primarily a way of teaching a large number of students on a very small budget and its revival in the USA in the early 1960s was, in part, due to an impending shortage of teachers. The emphasis on that time upon individualized instruction also filled interest in peer tutoring. With the recognition of underachievement and the value placed upon compensatory education and anti-poverty drives in the 1970s, book into the use of peer tutoring became intense (Topping, 1988). Interest in peer tutoring was to emerge later in Britain and then in America and only really developed pace in the 1980s with the development of diverse tasks on parental involvement in children's reading (Topping and Wolfendale, 1985).

The word peer tutoring has been used to describe a wide range of systems down the years but generally refers to situations where children teach other children. Loosely speaking, the term 'peer" implies same age' or connotes equivalence between individuals' and the term "tutoring' implies teaching or coaching (Myreddi, V). Goodlad and Hirst, 1989) described peer tutoring as "The gadget of education wherein beginners assist each different and learn by using coaching." Probably the maximum succinct definition of peer tutoring comes from Damon and Phelps "Peer tutoring is a method in which one toddler instructs every other toddler at the fabric on which the first is a professional and the second one is a newbie."(Damon and Pheleps, 1989, P-LI). However more than one definitions of peer tutoring exist however they may be now not all constant for instance, not all peer tutors are professionals, they're now and again randomly assigned, same-age classmates. (Greenwood, Deliquardi, and Hull, 1989) or same-aged low achievers. (Piggot, 1986). In much of the literature, peer tutoring is used to describe the use of any non-professional in the role of a teacher. Accordingly, peer tutoring has been defined as: “... someone belonging to the same group in the society where membership is defined by status. In this case, such status is that of being a fellow learner and not a professional teacher."(Goodlad and Hirst, 1990). To make matters more confusing the term peer tutoring often subsumes both cross-age and same-age tutoring. (Page Kalowaski, 1999). As Gaustad explains Peer tutoring occurs whilst tutors and tutees are of the identical age. In go-age tutoring, the education is older than the tutees. However, occasionally the term peer tutoring is used to consist of both types. (Gausted, 1993, P-1). Finally, a few bookers imply that there is no such aspect as an 'actual peer show'. As Damon and Phelps positioned it "Peer tutoring is frequently referred to as cross-age tutoring due to the fact the teacher is normally two or extra years older than tutees.

Peer tutoring is a method of coaching in which one pupil (or a small organization of students) receives personalized and individualized education

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(Medway, 1995). In tutoring, the coaching is called a show, while the pupil is referred to as a tutee. Tutoring most often supplements conventional classroom training, that's usually performed in huge agencies for the one's students who require remedial assist and people who've difficulty getting to know by using conventional methods. Being closer in expertise and standing, the tutee in a peer relation feels freer to specific reviews, ask questions, and danger untested solutions. The interaction among trainer and scholar is greater balanced and greater active whilst the instruct is a peer (Damon and Phelps, 1989). A theoretical grounding for peer tutoring can be determined in L.S. Vygotsky's idea of the Zone of Proximal Development.

Peer getting to know is extensive gaining knowledge of approach. It covers an extensive range of activities through which humans book through distinctive strategies. These activities ranged from a conventional proctor model in faculties to the more progressive studying groups in schools and universities. In the proctor model, the senior students act as tutors and junior college students as tutees. On the other hand, in revolutionary studying groups students of the same age organization or same degree assist each other by using forming partnerships. (Griffiths, Housten, and Lazenbatt, 1995). Vygotsky changed into the most powerful supporter of peer tutoring. Vygotsky stated that the instructional overall performance of slow beginners may be progressed if they had been engaged in collaborative work or peer tutoring. Vygotsky classified newcomers into three categories based totally on their cognitive improvement:

(1) The sector of real improvement, in which the scholars are impartial of their gaining knowledge of, means that the man or woman does no longer need any assist inside the getting to know of a specific subject matter at this stage;
(2) The zone of proximal improvement, wherein the scholars depend on one more for mastering and need a bit of help (Vygotsky advocated peer tutoring for the students on this level);
(3) The zone of no improvement, in which students can't carry out or study something even in the presence of external assistance.

3.2 Statement of The Study :

“Effect of peer tutoring on achievement of number skills among children with intellectual disabilities at primary level”

The problem seeks to study the effect of peer tutoring on disabled children, on number skills, social skills, and communication skills. Its primary cause is to determine the extent of the relationship, which exists among the said variables. The present study is to investigate the effect of peer tutoring

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on the achievement of number skills among children with intellectual disabilities at the primary level.

3.3 The Need And Justification Of The Study:

Reviewing the available literature to the booker on the effect of peer tutoring on achievement of number skills, it's far being recognized that although there is a whole lot of literature available on the effect of peer tutoring however most of them are associated with the youngsters with L.D. A few available pieces of literature on the effect of peer tutoring consider the everyday friends or the siblings as peer instruct. Two book determined wherein tutors and tutees each have been children with intellectual retardation. In the primary observe Hoopeer, H., and Bowler, D.M. (1991) investigated the impact of peer tutoring on guide signs through adults with intellectual disabilities. In this take a look at a set of eight students with intellectual disabilities of the extent slight to mild have been taught approaches to sell communication in 11 in their less capable friends. The tutors had been two guys and 6 ladies ranging the age 22-28 years. Tutors were selected on the premise of the investigator's judgment, and their level of self-esteem. The tutees were 7 guys and 4 ladies in the age range of 21 year 6 months to 50 years. The experimental layout becomes pre-test post-test no manipulate group design. Tutors have been proven the way to inspire students to make signs and symptoms for gadgets occasions in a ramification of settings. This normally entails maintaining up an item, making the ideal signs and symptoms, and encouraging the pupil to imitate. In the 2 weeks following schooling, the tutors implemented the abilities they have been taught with the students. The results of the study demonstrated that people with mild to moderate handicaps can work successfully as a peer.

In another study, Koury and Browder (1986) investigated the use of the effectiveness of the delayed cues by moderate children with intellectual disabilities. The peer tutors were first taught the sight words with the time put off manner after which taught to use the delay method to educate the words to more youthful friends who had been additionally children with highbrow disabilities. All the children found out five sight words in four sessions. The above-mentioned studies are strong evidence that children with intellectual disabilities may also be able to teach their younger peers. If we get that children with intellectual disabilities may be able to teach their younger peers, it is an extra-human resource for special educators. Also, it is beneficial for tutors as well as tutees with intellectual disabilities.

2019 "State of the Education Report for India: Children with Disabilities" took into consideration the 2011 census, in keeping with which there are 78,64,636 children with incapacity in India constituting 1.7

percentage of the overall toddler population. The report highlighting accomplishments and challenges about the proper training of children with disabilities (CWDs) turned into released. . 61 percent of CWDs aged between five and 19 have been attending an academic corporation compared to the overall seventy-one percentage while all kids are considered. Around 12 percentage of CWDs dropped out of faculty, which is comparable with the general percent of dropouts among all youngsters. 27 percentage of CWDs by no means attended any instructional group, instead of the general determine of 17 percent whilst the complete infant populace is taken under consideration, it delivered. A big variety of kids with disabilities do now not go to normal school. An evaluation of enrolment figures at NIOS indicates a decline for most categories of disabilities between 2009 and 2015. "The largest institution of CWDs enrolling with NIOS over time had been people with gaining knowledge of disabilities. While there has been a drop in enrolment of students with locomotor and visible impairments, there has been a rise in those with multiple disabilities.

"The percent of kids attending faculties is the lowest amongst people with multiple disabilities, mental ailments, and intellectual retardation," the document said. Children with disabilities face multiple sorts of discrimination which results in their exclusion from society and college. Attitudes in the direction of children with intellectual disabilities, in addition to a lack of sources, to accommodate them, compound the demanding situations they face in accessing training. While the loss of getting admission to high school is a trouble, the identical problem is the dearth of the potential of the training machine no matter the tremendous use of peer tutoring, wherein common friends coach college students in self-contained lecture rooms, the most distinguished blessings of peer tutoring students with disabilities obtain as a category-wide peer tutoring. Peer-tutoring studies concerning college students with severe disabilities in self-contained, or close to self-contained school rooms, give perception into how peer tutoring benefits the tutee. However, peer tutoring presents to the tutors of students with extreme disabilities is constrained in amount, element, player numbers. That is why, this book is done for the welfare of the society, for helping those students who are not capable of doing easy daily life tasks which can be done by same age group of children.

Peer Tutoring is widely practising across a while, grade levels, and issue areas. By these practices, intellectually disabled children can develop self-dependence, caring nature, helpful nature. The intervention permits the students to receive one-to-one assistance and hence, intellectually disabled children need extra attention towards themselves and if the single subject is taught by the single tutor. It is very beneficial for the student as grasping the

power of a student is better in single assistance rather than in a group because teaching a single student is an easier task for a tutor than studying the students in a group. Intellectually disabled children mostly like not to meet any strangers, they fear someone they don't know, therefore when these children are divided into groups, tutors first interact with them by any method they like (by playing with them, by giving them their favourite things like chocolates or ice-cream, by praising them for anything they do, etc.) and then tutors develop the social skills and communication skills in the intellectually disabled children. These children improve significantly after participation in the peer tutoring program. The academic and social benefits are experienced by functioning either as a tutor or as a tutee. Intellectually disabled children act as tutors, tutees, or both for the same age group or younger children having the same problem as they have, and due to this reason, intellectually disabled children can teach their young ones, therefore, peer tutoring is good for them.

After successful peer tutoring, intellectually disabled children can be peer tutors for other intellectually disabled children. These children can be ideal for the society and earn a livelihood for themselves and uphold their responsibilities towards their family. Students have expanded opportunities to reply in smaller companies and this is an advantage for the students to study in small groups rather than in big ones hence, by studying in small groups strengthen the foundation of all the concepts and also clears all the doubts in children. Tutors are helpful by changing the attitudes towards the capabilities of children with intellectual disabilities. Therefore, it is very necessary for the children, and this book will present as an ideal for society in these intellectually disabled children as well as the book is very much needed to make them dependent from the professional level as well. Peer Tutoring is a very essential teaching for intellectually disabled children. Through this teaching, these children can be made very self-sufficient, financially successful, so that they can also a normal people or general students in society too. Children can achieve every goal in their life, so peer tutoring is very important for them. Such book should be done from time to time in society. Intellectual disabled children's position in India is very pathetic.

This book is very important to improve this situation. It promotes educational and social improvement for tutees. Peer tutoring increases self-assurance and self-efficacy. The need and significance for such book are that Intellectual Disabled Children will become self-sufficient only when they are given any kind of vocational training. Their social skills, communication skills, and number skills are developed. All this is possible only through peer tutoring. Peer tutoring is a method in which children can

be made economically self-sufficient and can also be given vocational training, so this book is very much needed for our society, and such book should be done from time to time. The booker has to try to search that whether peer tutoring is effective on the achievement of number skills among children with intellectual disabilities at the primary level. Further, the effort was made to find out peer tutoring is an effective method to teach number skills, social skills, communication skills to children with intellectual disabilities even when the tutors are the elder children with intellectual disabilities and tutees are their less able peers with intellectual disabilities.

3.4 Objectives Of The Study:

1. To compare the pre-test and post-test achievement scores of number skills of children with intellectual disability at primary level as a result of peer tutoring.
2. To compare the performance of peer tutors with the fulfilment of a wide variety of abilities amongst kids with intellectual incapacity.
3. To analyse the effectiveness of peer tutoring for creating support for children with intellectual disabilities in an inclusive setting.
4. To find out the efficacy of peer tutoring when tutors are peers having mild intellectual disabilities.

3.5 Hypotheses of The Study:

Hypothesis:

1. There is no significant variation among the pre-test mean scores of peer tutors on communication skills.
2. There is no significant variation among the post-test mean score of peer tutors on communication skills.
3. There is no significant difference between the pre-test and post-test mean scores of peer tutors on communication skills.
4. There is no significant variation among the pre-test mean scores of peer tutors on social skills.
5. There is no significant variation among the post-test mean score of peer tutors on social skills.
6. There is no significant difference between the pre-test and post-test mean scores of peer tutors on social skills.
7. There is no significant variation among the pre-test mean score of peer tutees on number skills -2.
8. There is no significant variation among the post-test mean score of peer tutees on number skills -2.
9. There is no significant difference between the pre-test and post-test mean scores of peer tutees on number skills -2.

10. There is no significant variation among the pre-test mean score of peer tutees on task-1
11. There is no significant variation among the post-test mean score of peer tutees on task-1
12. There is no significant difference between the pre-test and post-test mean score of peer tutees on task-1
13. There is no significant variation among the pre-test mean score of peer tutees on task-2
14. There is no significant variation among the post-test mean score of peer tutees on task-2
15. There is no significant difference between the pre-test and post-test mean score of peer tutees on task-2
16. There is no significant difference between the pre-test and post-test mean score of peer tutees on task-1 and task 2
17. There is no significant difference between peer tutors with the achievement of number skills of peer tutees on task -1.
18. There is no significant difference between peer tutors with the achievement of number skills of peer tutees on task -2.
19. There is no significant variation among the pre-test mean score of peer tutees on communication skills.
20. There is no significant variation among the post-test mean score of peer tutees on communication skills.
21. There is no significant difference between the pre-test and post-test mean scores of peer tutees on communication skills.
22. There is no significant variation among the pre-test mean score of peer tutees on social skills.
23. There is no significant variation among the post-test mean score of peer tutees on social skills.
24. There is no significant difference between the pre-test and post-test mean scores of peer tutees on social skills.

3.6 LIMITATIONS OF THE STUDY:

There are limitations to the present investigation:

1. The look at becoming restricted to the inclusive and special schools of Kota, Rajasthan.
2. The study was limited to an age group of 7-11 years.
3. Only the subjects with mild and moderate disabilities were included in the study.
4. The children who secured 40% of marks, were eligible in the checklist.

5. Students having a severe or profound intellectual disability and the ones which have any type of sensory impairments like visual impairment, hearing impairment, or severe speech delay were not taken as a part of the sample.
6. The limitation of the study may be the lack of a control group design, which may limit the generalizability i.e., the external validity of the study's findings has a look at.
7. Another limitation of the present study is the experimental setting which is common in most experimental designs. Tutors and tutees may not give the same response in a natural classroom setting. It limits the ecological validity of the book findings.

3.7 Method and Procedure

In this study, a Single-case experimental design was used. A character “case” is the unit of intervention and unit of data evaluation. The case gives its very own control for functions of comparison. For instance, the case’s series of final results variables are measured before the intervention and as compared with measurements taken at some point of (and after) the intervention. The outcome variable is measured time and again inside and throughout different conditions or degrees of the unbiased variable.

The method used in the take a look at is a single case experimental layout focusing on a single problem at a time. Single-subject designs are concept to be a right away result of the studies of B.F. Skinner implemented the strategies of operant conditioning to subjects and measured the consequences at diverse points in time. Because of this, single concern designs are often taken into consideration the design of preference when measuring behavioural alternate or whilst appearing behavioural amendment. Rather than evaluating companies of topics, this layout is based on the comparison of treatment outcomes on an unmarried challenge or institution of unmarried topics. These designs are used primarily to evaluate the impact of a selection of interventions is carried out studies. According to Nelson and Martella (1999), Single-issue studies are experimental as opposed to correlational or descriptive, and its cause is to document causal, or functional, relationships among impartial and established variables. Single-subject book employs inside and among topics’ comparisons to manipulate for essential threats to internal validity and calls for systematic replication to decorate external validity (Nelson & Martella,1999).

According to Gay & Airasian (2003), Single Subject book Designs (additionally known as single-case experimental designs) are designs that

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may be carried out whilst the sample length is one or while some individuals are taken into consideration as one organization. These designs are typically used to examine the behavioural exchange a person famous because of a few treatments. In single-concern designs, each player serves as her or his very own control, much like a time-series design. The player is exposed to a non-remedy and a remedy section and performance is measured all through every section.

3.8 The Sample Of The Study:

Sample and Sampling:

Eight students with intellectual disability from the class primary using purposive sampling method – 1 within the age range of 7-11 Year is selected as peer tutees randomly followed by the inclusion criteria given below:

Criteria for Inclusion:

1. A student with a mild to moderate level of intellectual disability was selected for the study.
2. Tutees were able to comprehend and following of simple instructions.

Criteria for Exclusion:

1. Students having severe sensory impairment like visual impairment, hearing impairment, or any type of severe physical disability which hinders the learning process are not considered while selecting a sample for the study.
2. Students with severe and profound highbrow disabilities were excluded from the examination.

Selection of students:

Total No. of children	Selected children in a group		Total No. of selected children	Total
15	Tutor	Tutees	6	6
	3	3		

Variables

Though the present study is an ex-port facto study. However, two types of variables were identified as per the objectives of the investigation i.e., variable and independent variable.

a) Independent Variables

1. Number Skills
2. Communication Skill
3. Social Skill

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b) Dependent variables

1. Peer Tutors and Peer Tutees

6.9 Tools: The Following Tools Is Developed For Data Collection-

1. **Checklist for peer tutors**: The booker had developed three checklists for the assessment and selection of peer tutors.

- Checklist for assessment for number skills (CANS-1),
- Checklist for assessment of communication skills (CACS) and
- Checklist for assessment of social skill (CASS)

a. CANS-I: (Checklist for Assessment of Number Skills-1)

The checklist consists of 40 items, which assesses number skills. Before using the checklist, the initial checklist which was consisting 42 items, was given to 10 experts for validating the checklist. As per the comments of the experts, modifications were incorporated and two of the items marked by the experts as inappropriate were deleted from the final version. Out of 42 items, 40 items were found appropriate. Hence the final version of CANS-I consisted the 40 items.

b. CASS: (Checklist for Assessment of Social Skills)

The checklist consists of 20 items, which assesses social skills. Before using the checklist, the initial checklist which was consisting 20 items, was given to 10 experts for validating the checklist. As per the comments of the experts, modifications were incorporated and no items of the checklist were marked by the experts as inappropriate. Hence the final version of CASS consisted the 40 items,

c. CACS: (Checklist for Assessment of Communication Skills)

The checklist consists of 15 items, which assesses Communication skills. Before using the checklist, the initial checklist which was consisting 15 items, was given to 10 experts for validating the checklist. As per the comments of the experts, modifications were incorporated and no items of the checklist were marked by the experts as inappropriate. Hence the final version of CACS consisted the 15 items.

2. Checklists for tutees: The booker has prepared another checklist for assessing the number of skills of peer tutees.

d. CANS-II: (Checklist for Assessment of Number Skills-II)

The checklist consists of 20 items, which assesses the number skills of peer tutees i.e., number skills at the primary level. Before using the checklist, the initial checklist which was consisting 20 items, was given to 10 experts for validating the checklist. As per the comments of the experts, modifications were incorporated and no items of the checklist were marked by the experts as inappropriate. Hence the final version of CANS-II consisted the 20 items.

6.10 STATISTICAL ANALYSIS

Selected information is analysed using SPSS (Statistical Package for Social Sciences). Data were analysed through the computer. The analysis has confirmed the objectives and the Apotheosis as formulated by the investigator. The following statistical techniques have been employed for the analysis of data.

- ANOVA
- Mean
- Standard Deviation (SD)
- Achievement Percentage

3.11 Major Findings

3.11.1 Findings of the analysis and interpretation of the data There is no significant variation among the pre-test mean scores of peer tutors on communication skills.

The comparison of the pre-test scores of peer tutors using ANOVA revealed that there is no significant variation among the pre-test mean score of peer tutors on communication skills, we observed the initial state of communication skills among peer tutors and the status of their baseline.

3.11.2 Findings of the analysis and interpretation of the data There is no significant variation among the post-test mean score of peer tutors on communication skills.

The comparison of the post-test scores of peer tutors using ANOVA revealed that there is no significant variation among the post-test mean score of peer tutors on communication skills. It means that the communication skills of intellectually disabled tutors with post-test stage significantly increased among the variance of peer tutors.

3.11.3 Findings of the analysis and interpretation of the data There is no significant difference between the pre-test and post-test mean scores of peer tutors on communication skills.

The comparison of the pre-test and post-test scores of peer tutors using t-test revealed that there is a significant difference between the pre-test and post-test mean scores of peer tutors on communication skills. It can be calculated that the scores of the post-test are greater than that of the pre-test, so there is a significant improvement in the communication skills of peer tutors.

3.11.4 Findings of the analysis and interpretation of the data There is no significant variation among the pre-test mean scores of peer tutors on social skills.

The comparison of the pre-test scores of peer tutors using ANOVA revealed that there is no significant variation among the pre-test mean score of peer tutors on social skills and baseline condition among the peer tutors for their initial stage and social skills.

3.11.5 Findings of the analysis and interpretation of the data of There is no significant variation among the post-test mean score of peer tutors on social skills

The comparison of the post-test scores of peer tutors using ANOVA revealed that there is no significant variation among the post-test mean score of peer tutors on social skills. It means that the social skills of intellectually disabled tutors with post-test stage prevailed significantly increased among the variance of peer tutors.

3.11.6 Findings of the analysis and interpretation of the data There is no significant difference between the pre-test and post-test mean scores of peer tutors on social skills.

The comparison of the pre-test and post-test scores of peer tutors using t-test revealed thatthere is a significant difference between the pre-test and post-test mean scores of peer tutors on social skills. It concluded that the mean score of post-tests is higher than the mean scores of pre-tests of peer tutors in social skills. This study signifies that the social skills of all the peer tutors were improved significantly after participating in the peer tutoring program.

3.11.7 Findings of the analysis and interpretation of the data of There is no significant variation among the pre-test mean score of peer tutees on number skills -2.

The comparison of the pre-test scores of peer tutees using ANOVA revealed that there is significant variation among the pre-test mean score of peer tutees on number skills - 2 and findings of the initial condition of peer tutees i. e., where does it exist and also suggest the status of their baseline.

3.11.8 Findings of the analysis and interpretation of the data of There is no significant variation among the post-test mean score of peer tutees on number skills -2.

The comparison of the post-test scores of peer tutees using ANOVA revealed that there is no significant variation among the post-test

mean score of peer tutees on number skills -2. Tutees showed a significant gain in number skills – 2. Tutees showed a significant gain in number skills as a result of peer tutoring.

3.11. 9 Findings of the analysis and interpretation of the data of There is no significant difference between the pre-test and post-test mean scores of peer tutees on number skills -2.

The comparison of the pre-test and post-test scores of peer tutees using t-test revealed thatthere is no significant difference between the pre-test and post-test mean score of peer tutees on number skills -2. It concludes that the mean scores of the post-test are higher than the mean scores of pre-test of peer tutees in Number Skills – 2. There is a significant improvement in the performance of tutees on Number Skills – 2.

3.11.10 Findings of the analysis and interpretation of the data of There is no significant variation among the pre-test mean score of peer tutees on task-1

The comparison of the pre-test scores of peer tutees using ANOVA revealed that there is no significant variation among the pre-test mean scores of peer tutees on task-1. It exists and also suggests the status of their baseline. We also observe the initial state of Task – 1 among peer tutees.

3.11.11 Findings of the analysis and interpretation of the data of There is no significant variation among the post-test mean score of peer tutees on task-1

The comparison of the post-test scores of peer tutees using ANOVA revealed that there is significant variation among the post-test mean score of peer tutees on task-1. It can be concluded that the post-test is superior to the pre-test mean score of peer tutees on task -1.

3.11.12 Findings of the analysis and interpretation of the data of There is no significant difference between the pre-test and post-test mean scores of peer tutees on task – 1

The comparison of the pre-test and post-test scores of peer tutees using t-test revealed thatthere is a significant difference between the pre-test and post-test mean score of peer tutees on task – 1. It concludes that the mean score of post-test is higher than the mean scores of pre-test of peer tutees in task – 1. Hence, we calculated the value of the t-test and it suggests that our null hypothesis is rejected. This also proves that there is a

significant difference between the pre and post-test mean scores of peer tutees on task – 1.

3.11.13 Findings of the analysis and interpretation of the data of There is no significant variation among the pre-test mean score of peer tutees on task-2

The comparison of the pre-test scores of peer tutees using ANOVA revealed that there is no significant variation among the pre-test mean scores of peer tutees on task-2. Thus, it can be tentatively interpreted that peer tutoring is more effective for peer tutees on task – 2.

3.11.14 Findings of the analysis and interpretation of the data of There is no significant variation among the post-test mean score of peer tutees on task - 2

The comparison of the post-test scores of peer tutees using ANOVA revealed that there is significant variation among the post-test mean score of peer tutees on task – 2. It concludes that there is no significant variance among the groups. It means that task – 2 numeral symbols of tutees with post-test stage prevailed significantly increased among the variance of peer tutees.

3.11.15 Findings of the analysis and interpretation of the data of There is no significant difference between the pre-test and post-test mean scores of peer tutees on task -2

The comparison of the pre-test and post-test scores of peer tutees using t-test revealed that there is a significant difference between the pre-test and post-test mean scores of peer tutees on task -2. We can observe that the mean scores of post-tests are higher than the mean scores of pre-tests of peer tutees in task 2. It suggests that our null hypothesis is rejected. This also proves that peer tutoring induces an effective skill for intellectually disabled children. Based on post-test scores of peer tutees on task-2 (numeral symbols), we analyse that peer tutoring is more effective.

3.11. 16 Findings of the analysis and interpretation of the data of There is no significant difference between the pre-test and post-test mean score of peer tutees on task-1 and task 2

The comparison of the pre-test and post-test scores of peer tutees using t-test revealed that there is a significant difference between the pre-test and post-test mean scores of peer tutees on task-1 and task 2. It can be observed that the mean scores of post-tests are higher than that of the mean scores of pre-tests of all peer tutees. Hence, it also signifies that

there is more increase in pre-test and post-test mean achievement scores of tutees on task-1 (counting and giving objects), simultaneously on task-2 (matching numeral symbol with given objects).

3.11.17 Findings of the analysis and interpretation of the data of There is no significant difference between peer tutors about the achievement of number skills of peer tutees on task -1.

The comparison between all the three pairs of peer tutees using t-test revealed thatthere is no significant difference between peer tutors about the achievement of number skills of peer tutees on task -1. It was shown that the difference between the mean of the three pairs groups was not significant and all pair groups were equivalent before the peer tutoring based on the achievement of the tutees the result showed that the tutees – 3 in pair – 2 more effective than the others.

3.11.18 Findings of the analysis and interpretation of the data of There is no significant difference between peer tutors about the achievement of number skills of peer tutees on task -2.

The comparison between all the three pairs of peer tutees using t-test revealed that there is no significant difference between peer tutors about the achievement of number skills of peer tutees on task -2. The performance and achievement of all tutees on task-2, “matching numeral symbol” is known from this test. The achievement scores were analysed in comparison to the treatment condition. The t-test indicates that there is no significant improvement in the performance of all tutees on task-2. The result evidences the strong impact of peer tutoring on the achievement of matching numeral symbols of peer tutees.

3.11.19 Findings of the analysis and interpretation of the data of There is no significant variation among the pre-test mean score of peer tutees on communication skills.

The comparison of the pre-test scores of peer tutees using ANOVA revealed that there is no significant variation among the pre-test mean scores of peer tutees on communication skills. The initial condition of peer tutees i.e., where does it exist and also suggests the status of their baseline. we observed the initial state of communication skills among peer tutees and the status of their baseline.

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3.11.20 Findings of the analysis and interpretation of the data of There is no significant variation among the post-test mean score of peer tutees on communication skills

The comparison of the post-test scores of peer tutees using ANOVA revealed that there is significant variation among the post-test mean score of peer tutees on communication skills. We conclude that there is significant variance among the groups. It means that communication skills of intellectually disabled tutees with post-test stage prevailed significantly increase among the variance of peer tutees.

3.11. 21 Findings of the analysis and interpretation of the data There is no significant difference between the pre-test and post-test mean scores of peer tutees on communication skills.

The comparison of the pre-test and post-test scores of peer tutees using t-test revealed that there is no significant difference between the pre-test and post-test mean scores of peer tutees on communication skills. The result proved that there is no significant difference between the pre-test and post-test mean scores of peer tutees on communication skills. The improvement in communication skills mostly takes place through peer interaction modelling and imitation which is being given by Bandura in his theory of social learning.

3.11.22 Findings of the analysis and interpretation of the data of There is no significant variation among the pre-test mean score of peer tutees on social skills.

The comparison of the pre-test scores of peer tutees using ANOVA revealed that there is no significant variation among the pre-test mean scores of peer tutees on social skills. It reveals that the pre-test scores initially showed the social condition of intellectually disable tutees.

3.11.23 Findings of the analysis and interpretation of the data of There is no significant variation among the post-test mean score of peer tutees on social skills.

The comparison of the post-test scores of peer tutees using ANOVA revealed that there is no significant variation among the post-test mean score of peer tutees on social skills. It means that social skills of intellectually disable tutees with post-test stage prevailed a significant increase among the variance of peer tutees ., however, they enhanced performance in the post-test which might be the result of peer tutoring. This confirms Vigotsky.

3.11.24 Findings of the analysis and interpretation of the data of There is no significant difference between the pre-test and post-test mean score of peer tutees on social skills.

The comparison of the pre-test and post-test scores of peer tutees using t-test revealed that there is a significant difference between the pre-test and post-test mean scores of peer tutees on social skills. It concludes that the mean scores of pre-test of peer tutees in social skills. Based on this evidence it may be interpreted that peer tutoring had a significant effect on the achievement of social skills. this result is similar to the study of Osguthrope and Scruggs (1986), who concluded that these students experience academic and social benefits by functioning either as tutees.

3.12 Implication and Recommendation

The present study was concerned with the effect of peer tutoring on the achievement of number skills among children with intellectual disabilities at the primary level. The beauty of the study is that the study considered children with intellectual disable as tutors. Performance of students with intellectual disability on number skills in this study indicated that Peer Tutoring procedure is effective in the case of children with intellectual disable served as peer tutors. Also, the results strongly suggest that students with intellectual disable can increase their correct response on number skills when peer tutoring is provided. The present study has several positive findings which have a direct implication to classroom teachers in teaching children with intellectual disable. The major findings of the study are:

- **Significant improvement in social skills of the tutors:** The booker found in the study that the social skills of the all-peer tutors were improved significantly after participation in the peer tutoring program. This result is similar to the study of Osguthrope and Scruggs (1986), who concluded from major review and analysis that even special education students can function as tutors if they are trained and supervised properly and that these students experience academic and social benefits by functioning either as a tutor or as tutee. Results of the present study indicated that, though intervention program challenges the aspects of social behaviour had a positive influence on peer acceptance of intellectually disabled children. Thus, it can be inferred that from the time of enrolment, if intellectually disabled children are provided with opportunities and exposer to modify and refine their behaviour, it can foster a cordial and positive peer relationship between them.

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- **Improved communication skills of the tutors:** It is also being observed that not significant but, tutors improved their communication skills after the peer tutoring program. It may be contributed by more time to be suspended in the peer group because the improvement in communication skills mostly takes place through peer interaction modelling and imitation which is being given by Bandura in his theory of social learning.
- **Developed leadership qualities:** It is being observed by the booker during the experiment that playing the role of a teacher; tutors developed a sense of leadership and responsibility. All tutors were noted for their improved handling abilities of the children, their increased social relation with the classroom teacher as well as their randomly assigned tutees.
- **Applying innovative ideas:** The booker also observed that while teaching peer tutors were able to apply some innovative ideas. One day the booker told the tutors to teach their students their ideas. The result was an amazing one. Tutors started to teach their students with the help of counting chairs in the room: tables in the room, fans in the room, etc.
- **Punctuality:** Tutors were given the responsibility to come with their assigned tutees at 11 a.m. at the special education lab. The booker saw that during whole tutoring sessions all tutors came at the said time with their assigned tutees. This may be because of playing the role of the teacher: a responsible person.
- **Develop self-confidence:** Children with intellectual disabilities often experience frustration and failure in their academics. Peer tutoring helps them to reduce their academic anxiety to a great extent as they come across frequent success. Also, learning becomes fun when it is done through games and activities. This will turn help to develop their self-confidence and self-reliance.
- **Vocational Training:** The purpose of special education is to make children with intellectual disabilities self-dependent. This is possible only when children with intellectual disabilities become economically independent. We may use peer tutors as a human resource in providing vocational training to children with intellectual disable.
- Tutees confirmed a tremendous gain in a wide variety of talents as a result of peer tutoring.
- Peer tutors confirmed an enormous advantage in their social abilities.

- Although tutors did not show a significant gain in communication skills, they sowed the strong impact of peer tutoring on their communication skills.
- Peer tutors showed interest in participating in tutoring dyads.
- Tutees showed interest in participating in tutoring dyads.
- Tutors showed increased ability to handle their junior students.

The findings of the study reveal that peer tutoring may be an effective method to teach several skills to children with Intellectual disabilities even when the tutors are the elder children with Intellectual disabilities and tutees are their less able peers with Intellectual disabilities. The results of the study indicate that children with Intellectual disabilities attending the prevocational level can be effective tutors of the students with Intellectual disabilities attending the primary level. This result is consistent with the study of Hooper H. and Bowler D.M. (1991) in which students with intellectual disability effectively taught the manual signs to their younger students' intellectual disability and with the study of Koury M. and Browder D.M. in which children with intellectual disability effectively taught sight words to their juniors' students with intellectual disability.

The establishment of a peer tutoring program for children with an intellectual disability appears to be an effective way to assist their learning while permitting their teacher time to work with other students and/or to conduct other classroom activities. Based on the results of this study, the educational, social, and economic benefits of a peer tutoring program with students who have intellectual disability justify the training and in-service necessary to set up an effective program and indicate that the teaching of beginning skills in mathematics need not be the responsibility of teachers only. The findings of the study support the efficacy of peer tutoring programs for and by students with intellectual disabilities. Additional empirical data are needed, however, concerning the use of tutoring programs with students with intellectual disabilities with varying levels and in other academic skill areas.

3.13. Suggestion For Further Book

booker studies on the Effect of Peer Tutoring are found in few numbers, especially in India. Even though the awareness on Effect of Peer Tutoring among teacher and parents are reaching new heights, the measures to minimize it are almost unknown. The present study would pave a path for further studies in the area of Peer Tutoring. Although the present study indicated the effectiveness of peer tutoring on the achievement of number

skills among children with intellectual disable but further book may be conducted:

1. The proposed results indicate that peer tutoring may be effective in teaching the number concept to intellectually disabled children.
2. Senior intellectually disabled students may be able to teach effectively and efficiently to their younger intellectually disabled students.
3. Peer tutoring provides opportunities to develop communication and social skills in intellectually disabled children, and it's furthermore, probably can develop other skills as well in the future.
4. In the unique school, in which regular students are hardly ever to be had for the implementation of the peer tutoring program, in such instances, the peer tutoring application can be implemented by using utilizing senior youngsters with highbrow disable as peer tutors.
5. In inclusive settings, tutoring by students with intellectual disabilities may help change the attitudes towards the capabilities of children with intellectual disabilities.
6. It can be beneficial also in teaching functional teachers to teach children with highbrow disabilities.
7. Implementing a peer tutoring program will always be fruitful for the special educators because their responsibility is being shared by these tutors so that the special educators may concentrate their attention on children with severe problems.
8. The present study was conducted on students in the Kota district of Rajasthan State. The related study can also be conducted in different districts of the state or country.
9. The number of skills of peer tutors may be measured by a large sample size with the help of the generalization of the results.
10. Likewise, in the present study, other studies may also be conducted with the different levels of intellectually disabled children with different age groups.
11. Studies can be performed to find out the effectiveness of peer tutoring on the educational achievement of intellectually disabled college students with extraordinary gaining knowledge of patterns.
12. Further book may be conducted with different formats of peer tutoring.
13. The present study compared the pre-test and post-test and in the same way, it may also be compared with the other methods of teaching by another booker.
14. A review of related literature indicated the lack of bookes on the effect of peer tutoring, especially in India. Hence, a book study can be

conducted on peer tutors concerning the achievement of number skills of peer tutors and tutees. In the same way, other bookers can also implement the related book in the future.

15. The present findings may be replicated with the other large samples of students with intellectual disabilities. It would be also seen that prudent to examine the effect of peer tutoring in another area of academic achievement when the tutors, as well as the tutees, are children with intellectual disabilities.
16. The present study focuses on the academic achievement of children with intellectual disabilities at the primary level. The above study can also be booked on the academic achievement of children with intellectual disability at the secondary level.
17. The impact of remedial behaviour modification techniques for learning disabled children with emotional problems can also be explored.
18. The current prevalence rate of intellectual disability is considered to be indefinite. The prevalence rate of intellectual disability in Rajasthan is further vague. A look at can is performed to find out the superiority of intellectual disability in Rajasthan.
19. The effect of peer tutoring on intellectually disabled children of age group 7-11 years was constructed and standardized in the present study. Similarly, the effect of peer tutoring on intellectually disabled children at the secondary level can be constructed and validated.
20. By using the effect of peer tutoring, other bookers can focus on the effect of peer tutors in academic achievement not only on a single intellectual disability but also focuses on multiple intellectual disabilities.
21. With different approaches to peer tutoring
22. The proposed activities and outcomes of book can be increased to other subjects by implementing e. g. in English, Maths, Social Science, etc. More activities and book can be introduced in the area of intellectually disabled children to ease their life comfortably and sophisticatedly.
23. Peer tutoring may be included in the daily life of intellectually disabled children in which the school teachers, parents, and peers can play a major role in the activities of the children, and thereby peer tutoring can enhance their academic achievement.