

Effect of Peer Tutoring on Social Skills Development among Students with Intellectual Disabilities in Inclusive Education

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Abstract

Social skills play an important role in the effective inclusion and participation of students with intellectual disabilities in general education settings. Students with intellectual disabilities often experience difficulties in communication, cooperation, peer interaction, and classroom participation, which may restrict their social inclusion and engagement. The present study examined the effectiveness of a structured peer tutoring programme in promoting social skills among students with intellectual disabilities in inclusive educational settings. A quasi-experimental pre-test-post-test control group design was employed. The study included ten students with intellectual disabilities, with five assigned to the experimental group and five to the control group. Five typically developing peers were selected and trained as peer tutors for the experimental group. A modified Social Skills Checklist based on the Functional Assessment Checklist for Programming (FACP) was used to assess social skills before and after the intervention. The intervention comprised structured peer tutoring activities focusing on communication, cooperation, sharing, turn-taking, helping, emotional expression, and social participation. The data were analyzed using mean, standard deviation, paired t-test, and independent t-test. The findings indicated greater improvement in social skills among students in the experimental group than among those in the control group. The students who participated in peer tutoring demonstrated improved peer interaction, classroom participation, communication, cooperation, and social engagement. The findings suggest that structured peer tutoring may be a practical and cost-effective instructional strategy for promoting social inclusion, communication, cooperation, and positive peer relationships among students with intellectual disabilities in inclusive classrooms.

Keywords: *Peer Tutoring; Social Skills; Intellectual Disability; Inclusive Education; Social Interaction; Cooperative Learning; Inclusive Classroom; Special Education.*

I. Introduction

Education is a fundamental human right and plays a crucial role in fostering the intellectual, social, emotional, and behavioural development of all children. Contemporary education systems emphasize not only academic achievement but also the holistic development of students to enable their meaningful participation in society. In this context, inclusive education has emerged as an important educational approach that aims to provide equitable learning opportunities to all children, irrespective of their abilities, disabilities, gender, language, or socioeconomic background. It is based on the principle that diversity should be recognized and valued and that all students should have opportunities to participate meaningfully in the same educational environment.

Students with Intellectual Disabilities (ID) often experience significant difficulties in adaptive behaviour, communication, social interaction, emotional regulation, and independent living skills. Although many students with intellectual disabilities are enrolled in inclusive schools, their participation in classroom activities and interactions with peers may remain limited. They may experience social isolation, low self-esteem, limited peer acceptance, and fewer opportunities to develop meaningful friendships. Such challenges can adversely affect their educational participation, social development, and long-term well-being and community inclusion.

Peer tutoring is an instructional approach in which a student without a disability provides structured academic and/or social support to a peer with a disability under the supervision and guidance of a teacher. Unlike conventional teacher-centred instruction, peer tutoring promotes active participation, collaborative learning, shared responsibility, and reciprocal communication among students. It provides students with intellectual disabilities with natural opportunities to observe and practise appropriate social behaviours, develop communication skills, receive immediate feedback, and experience positive peer interactions. At the same time, peer tutors may develop greater empathy, responsibility, cooperation, and acceptance of individual differences.

The use of peer tutoring is supported by several theoretical perspectives, including social constructivism, social learning theory, behavioural theory, and Vygotsky's concept of the Zone of Proximal Development (ZPD).

These perspectives emphasize the importance of social interaction, observation, guided practice, reinforcement, and collaborative learning in the acquisition and development of new skills. For students with intellectual disabilities, structured interaction with trained peer tutors can provide consistent support, modelling, guidance, opportunities for practice, and positive reinforcement, thereby facilitating both academic and social development.

Previous research has reported that peer tutoring can contribute to improvements in academic achievement, classroom participation, communication skills, self-esteem, peer acceptance, and cooperative behaviour. However, a substantial proportion of the existing literature has focused primarily on academic outcomes, whereas comparatively fewer studies have specifically examined the effectiveness of peer tutoring in developing social skills among students with intellectual disabilities in inclusive educational settings, particularly within the Indian context. This limited evidence highlights the need for systematic empirical research examining the role of peer-mediated interventions in promoting the social development and inclusion of students with intellectual disabilities.

Therefore, the present study examines the effectiveness of a structured peer tutoring intervention in enhancing the social skills of students with intellectual disabilities enrolled in inclusive schools. The intervention comprised structured peer tutoring activities designed to promote communication, cooperation, sharing, turn-taking, emotional expression, and positive peer interaction. Social skills were assessed before and after the intervention using an adapted version of the Functional Assessment Checklist for Programming (FACP).

The findings of the study are expected to contribute to the evidence base in the fields of inclusive and special education by providing empirical evidence regarding the effectiveness of peer tutoring as a practical, cost-effective, and potentially sustainable intervention for promoting the social skills of students with intellectual disabilities. The findings may also provide useful implications for general educators, special educators, school administrators, policymakers, and researchers in designing and implementing inclusive classroom practices that promote active participation, peer interaction, and social inclusion of students with intellectual disabilities.

II. Review of Related Literature

A review of literature provides the theoretical and empirical foundation for any research study. It helps the researcher understand previous findings, identify research gaps, and justify the need for the present investigation. The current review focuses on studies related to peer tutoring, social skills development, intellectual disability, and inclusive education.

Singh (1981) investigated the effectiveness of peer tutoring in improving mathematics achievement among students with learning disabilities. The study adopted an experimental design in which students receiving peer tutoring were compared with those receiving conventional instruction. The findings revealed that peer tutoring significantly enhanced students' mathematical performance, participation, and learning motivation. The study concluded that structured peer interaction creates a supportive learning environment that improves both academic achievement and confidence.

Russell and Ford (1983) compared one-to-one peer tutoring with teacher-led resource room instruction for students with mild and moderate intellectual disabilities. The study reported that students taught through peer tutoring achieved better improvements in reading recognition and comprehension than those taught only by teachers. The researchers concluded that peer tutoring provides individualized attention and encourages active learning.

Damon and Phelps (1989) described peer tutoring as a structured educational strategy in which a more competent learner assists another learner in acquiring academic and social competencies. Their theoretical work emphasized that learning through peers promotes communication, cooperation, problem-solving, and self-confidence. They suggested that peer tutoring benefits both tutors and tutees by strengthening learning through interaction.

Fuchs, Fuchs and Simmons (1997) evaluated Class-Wide Peer Tutoring (CWPT) in inclusive classrooms. Their findings demonstrated significant improvements in reading achievement among students with and without disabilities. The researchers concluded that peer tutoring promotes inclusive classroom participation, enhances motivation, and provides equal learning opportunities for diverse learners.

Myredden (1998) examined the effectiveness of peer-mediated instruction for students with intellectual disabilities. The intervention focused on reading, writing, and arithmetic skills. The findings showed remarkable improvement in academic performance and classroom engagement. The study recommended peer tutoring as an effective instructional approach for special education settings.

Mortweet, Utley and Walker (1999) investigated class-wide peer tutoring among students with mild intellectual disabilities. Their research found that peer tutoring significantly improved spelling achievement, classroom participation, and academic engagement. Students became more actively involved in classroom learning through peer collaboration.

Collins (2002) emphasized the importance of peer-mediated instructional strategies for students with moderate intellectual disabilities. The study concluded that peer support enhances communication skills, independence, and the generalization of learned behaviours across different learning situations.

Calhoon and Fuchs (2003) evaluated Peer-Assisted Learning Strategies (PALS) among secondary school students with disabilities. Their findings indicated significant improvement in mathematics achievement, classroom behaviour, and learning motivation. The researchers recommended PALS as an effective inclusive teaching strategy.

Owen-DeSchryver and colleagues (2008) investigated peer-mediated interventions for students with developmental disabilities. The study demonstrated that structured peer interaction increased communication frequency, peer acceptance, and positive social behaviour. The researchers concluded that peer-mediated instruction effectively promotes social inclusion.

Topping (2009) described peer tutoring as one of the most effective collaborative learning approaches in modern education. According to the study, peer tutoring improves academic achievement, communication skills, leadership qualities, empathy, cooperation, and self-confidence. The author highlighted its effectiveness in inclusive educational settings.

The reviewed studies consistently demonstrate that peer tutoring positively influences academic achievement, classroom participation, communication, social interaction, and self-confidence among students with disabilities. However, most previous investigations have focused primarily on academic performance. Comparatively fewer studies have specifically examined the effect of peer tutoring on the development of social skills among students with intellectual disabilities in inclusive schools, particularly in the Indian educational context. Therefore, the present study aims to address this research gap by examining the effectiveness of peer tutoring in enhancing social skills among students with intellectual disabilities studying in inclusive education.

Hudson, Browder and Jimenez (2014) investigated the effectiveness of peer-supported instruction for students with moderate intellectual disabilities in inclusive classrooms. The study found that peer-assisted teaching significantly improved students' classroom participation, communication, and social interaction. Students became more engaged in collaborative activities and demonstrated greater confidence while interacting with their classmates.

Pyle (2015) examined the effectiveness of one-way peer tutoring among secondary school students with learning disabilities. The findings revealed that peer tutoring increased academic achievement, student participation, and collaborative learning. The researcher concluded that structured peer support is an effective instructional strategy for inclusive classrooms because it provides individualized assistance without increasing teachers' workload.

Ali, Anwer and Abbas (2015) studied the influence of peer tutoring on students' social behaviour and academic performance. Their findings indicated that peer tutoring improved communication skills, cooperation, teamwork, and self-esteem among learners. Students developed stronger peer relationships and demonstrated greater confidence in classroom interactions.

Hetzroni and Banin (2016) explored the impact of group-based social skill interventions for students with intellectual disabilities. Their study concluded that structured peer discussions and cooperative activities significantly enhanced social participation, communication, and interpersonal relationships. The researchers emphasized that peer interaction provides natural opportunities to practice appropriate social behaviours.

Barman and Jena (2021) investigated the effectiveness of Interactive Video-Based Instruction for improving social and daily living skills among children with mild intellectual disabilities. The findings showed significant improvement in communication, personal care, independent functioning, and social participation. The researchers recommended combining technology with peer-supported learning for better educational outcomes.

Shanmugam (2021) examined peer tutoring in inclusive schools and reported that students with intellectual disabilities showed considerable improvement in peer acceptance, classroom participation, and social adjustment after participating in structured peer tutoring programs. The intervention also promoted empathy and positive attitudes among typically developing peers.

Jagan (2021) evaluated the impact of peer tutoring on self-help and adaptive behaviour among children with intellectual disabilities. The findings demonstrated significant improvement in independence, communication, classroom behaviour, and social interaction. The researcher concluded that peer tutoring contributes to the overall development of children with intellectual disabilities.

Moeyaert and et al (2021) conducted a meta-analysis of peer tutoring studies involving students with disabilities. The analysis concluded that peer tutoring produces moderate to large positive effects on academic performance, classroom behaviour, social communication, and peer interaction. The study strongly recommended the integration of peer tutoring into inclusive educational practices.

Upadhyay and Mishra (2021) investigated the role of peer tutoring in improving learning outcomes among children with intellectual disabilities. Their findings indicated significant improvement in numerical

abilities, responsibility, classroom participation, and independent task completion. The study emphasized that peer-mediated learning enhances both academic and social development.

Batool et al (2021) examined the effectiveness of peer tutoring among slow learners and students with mild intellectual disabilities. The study found significant improvements in academic performance, classroom engagement, communication skills, and positive behaviour. The researchers recommended peer tutoring as a practical and cost-effective strategy for inclusive education.

The reviewed literature demonstrates that peer tutoring is an evidence-based instructional strategy that enhances both academic and social outcomes among students with disabilities. Previous studies consistently reported improvements in communication, cooperation, peer relationships, self-confidence, classroom participation, adaptive behaviour, and academic achievement. However, only a limited number of studies have specifically examined the effect of peer tutoring on social skills development among students with intellectual disabilities in inclusive schools in the Indian context. This identified gap provides a strong rationale for conducting the present study.

Research Gap

Peer tutoring has been widely studied in general and special education, but most research has focused on academic outcomes such as reading, mathematics, achievement, and classroom participation. Comparatively fewer studies have examined its effectiveness in developing the social skills of students with intellectual disabilities (ID). Students with ID often experience difficulties in communication, peer interaction, cooperation, emotional expression, sharing, and social participation. Moreover, much of the existing evidence comes from Western countries, with limited empirical research in the Indian inclusive education context. Few studies have used structured peer tutoring activities specifically designed to develop social skills through natural peer interactions. There is also limited evidence using adapted measures based on the Functional Assessment Checklist for Programming (FACP) to assess changes in social behaviour. Therefore, the present study aims to examine the effectiveness of structured peer tutoring in enhancing the social skills of students with ID in inclusive schools in India.

Need and Significance of the Study

Successful inclusive education requires not only academic achievement but also social participation, peer relationships, and a sense of belonging. Students with ID may face difficulties in communication, friendship, cooperation, sharing, turn-taking, and classroom participation. At the same time, teachers may have limited opportunities to provide individualized support because of diverse learning needs and classroom demands. Structured peer tutoring can provide repeated opportunities for communication, cooperation, social interaction, modelling, feedback, and practice within natural classroom settings.

The present study is significant because it provides empirical evidence on the effectiveness of peer tutoring in developing social skills among students with ID. The findings may assist teachers, special educators, school administrators, teacher educators, curriculum developers, researchers, and policymakers in developing practical and cost-effective inclusive practices. The study may also support the objectives of the Rights of Persons with Disabilities Act, 2016, and National Education Policy, 2020, particularly in promoting equitable participation, social inclusion, and quality education for students with disabilities.

Objectives Of the Study

1. To assess the social skills of students with intellectual disabilities before the implementation of peer tutoring. To determine the effectiveness of peer tutoring on the social skills development of students with intellectual disabilities in inclusive education.
2. To compare the pre-test and post-test social skills scores of the experimental group.
3. To compare the pre-test and post-test social skills scores of the control group.
4. To compare the post-test social skills scores between the experimental and control groups.

Research Hypothesis

H01: There is no significant difference between the pre-test and post-test social skills scores of the experimental group.

H02: There is no significant difference between the pre-test and post-test social skills scores of the control group.

H03: There is no significant difference between the post-test social skills scores of the experimental and control groups.

Research Methodology

Research methodology refers to the systematic procedures adopted to collect, analyze, and interpret data to address the research problem. The present study examined the effectiveness of peer tutoring in enhancing the social skills of students with intellectual disabilities in an inclusive educational setting.

Research Design

The study employed a quasi-experimental pre-test–post-test control group design. Participants were divided into an experimental group and a control group. The experimental group received a structured peer tutoring intervention, whereas the control group continued with regular classroom instruction. Social skills were assessed in both groups before and after the intervention.

Population of the study

The population comprised students with intellectual disabilities enrolled in inclusive schools in Lucknow, Uttar Pradesh.

Sample of the study

A total of 10 students with intellectual disabilities were selected through purposive sampling and divided equally into two groups:

- Experimental Group: 5 students
- Control Group: 5 students

Additionally, five typically developing peers were selected and trained to serve as peer tutors for the experimental group. Each student with intellectual disabilities in the experimental group was paired with one peer tutor (1:1 ratio).

Sampling Technique

Purposive sampling was used to select participants who met the predetermined inclusion criteria.

Inclusion Criteria

Participants:

- were diagnosed with mild or moderate intellectual disability;
- were aged 7–14 years;
- were enrolled in an inclusive school;
- were able to participate in classroom and intervention activities;
- had regular school attendance; and
- had informed parental/guardian consent.

Research Tools

Data were collected using a Adapted Functional Assessment Checklist for Programming (FACP) – Social Skills Checklist. The checklist assessed selected social behaviours, including:

- Greeting others
- Eye contact
- Communication
- Sharing materials
- Turn-taking
- Helping others
- Waiting appropriately
- Emotional expression
- Following instructions
- Participation in group activities
- Cooperation
- Classroom interaction
- Social responsibility

Each behaviour was scored using a two-point scale:

Response Score

Performed 1

Not Performed 0

A higher total score indicated a higher level of demonstrated social skills.

Peer Tutoring Intervention

The structured peer tutoring intervention consisted of 40 sessions, conducted five days per week, with two sessions of approximately 45 minutes each day. The intervention was conducted during regular school hours under the supervision of the researcher and special educator.

The intervention included structured, activity-based tasks such as:

1. Emotion Card Game
2. Sneezing Manners Activity
3. Card Exchange Activity
4. Pass the Object Game
5. Freeze Dance with Yoga Actions
6. Colour Sharing Activity
7. Waiting Turn Activity
8. Finger Painting
9. Sorting Object Race
10. Balloon Tap Game
11. Name and Clap Activity

These activities were designed to promote communication, cooperation, sharing, turn-taking, emotional expression, peer interaction, and social participation.

Peer tutors received orientation regarding their roles and were trained to encourage interaction, model appropriate social behaviours, provide assistance, and offer positive reinforcement.

Data Collection Procedure

Prior to data collection, permission was obtained from the concerned school authorities, and informed consent was obtained from the parents/guardians of the participants and peer tutors. The purpose and procedures of the study were explained, and confidentiality of the participants' information was maintained.

First, a pre-test was administered to both the experimental and control groups to establish their baseline social skills. The experimental group then received the structured peer tutoring intervention, while the control group continued with regular classroom instruction.

Following completion of the 40-session intervention, a post-test was administered to both groups using the same assessment tool. The pre-test and post-test scores were subsequently organized and analyzed to determine changes in social skills and the effectiveness of the intervention.

Objective 1: To assess the effectiveness of peer tutoring on social skills development among children with intellectual disabilities in inclusive education.

Table 5: Pre-test score of experimental and control groups

EXPERIMENTAL GROUP					CONTROL GROUP				
S.no.	Name	Age	Peer Tutor	Pre-test Score	S.no.	Name	Age	Pre-test Score	
1	E1	10	P1	5	1	C1	11	6	
2	E2	12	P2	8	2	C2	13	5	
3	E3	13	P3	5	3	C3	8	6	
4	E4	14	P4	10	4	C4	14	8	
5	E5	14	P5	5	5	C5	10	5	
TOTAL SCORE				33	TOTAL SCORE				30
AVERAGE SCORE				6.6	AVERAGE SCORE				6

Fig. 1: Average of pre-test scores of experimental and control groups

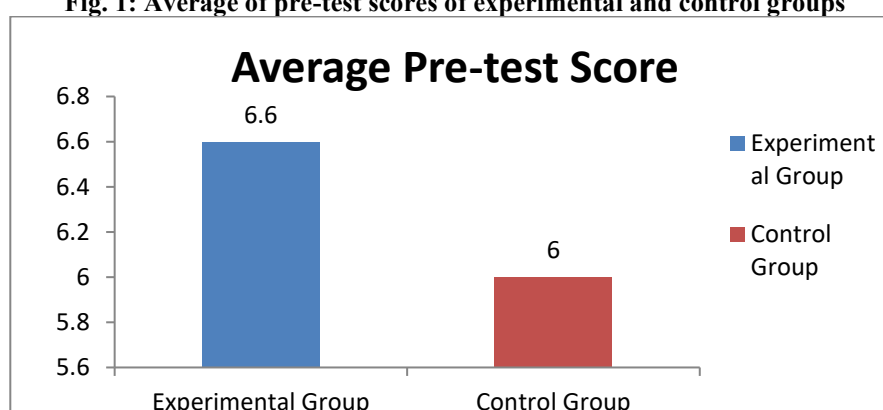


Table 1 presents the performance of the experimental and control groups in the pre-test conducted prior to the peer tutoring intervention. Each group consisted of five participants who had similar ages and levels of intellectual disability. The experimental group obtained a total score of 33, with an average score of 6.6. The control group achieved a total score of 30 and an average score of 6. The experimental group's scores varied from 5 to 10, whereas the control group's scores were between 5 and 8. The experimental group had a marginally higher average score compared to the control group, but the difference was small. This indicates that both groups possessed comparable social skills prior to the start of the intervention. The results suggest that the experimental and control groups were similar at the beginning of the study. The comparable performance of both groups at the beginning made them suitable for assessing the effectiveness of the peer tutoring intervention in the later stages of the study.

Objective 2: To compare the pre-test and post-test scores of experimental groups for the effect of peer tutoring on social skills development among students with intellectual disabilities in inclusive education

Table 2: Pre-test and post-test of the experimental group.

EXPIREMENTAL GROUP					
S.no.	Name	Age	Peer Tutor	Pre-test Score	Post-test Score
1	E1	10	P1	5	15
2	E2	12	P2	8	18
3	E3	13	P3	5	10
4	E4	14	P4	10	19
5	E5	14	P5	5	9
Total score				33	71
Average score				6.6	14.2

Fig. 2—Pre-test and Post-test Mean Scores of the Experimental Group

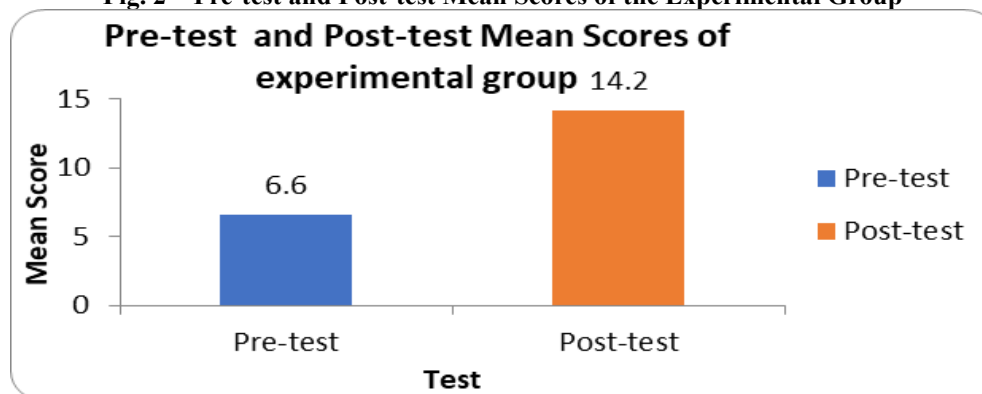


Table 2 shows a comparison of the pre-test and post-test scores for the experimental group to assess the impact of the peer tutoring intervention on the social skills of children with intellectual disabilities in an inclusive education environment. Prior to the intervention, the five participants in the experimental group achieved a total pre-test score of 33, which gives an average score of 6.6. Scores varied between 5 and 10. After the peer tutoring program was implemented, the overall post-test score rose to 71, resulting in an average score of 14.2. The scores after the test ranged from 9 to 19. The significant rise in the average score from the pre-test to the post-test indicates a marked enhancement in the participants' social skills following the peer tutoring program. A paired t-test was performed to assess if this improvement was statistically significant. Table 2 displays the results of the statistical analysis, which help evaluate the effectiveness of the intervention.

Figure 2 shows a bar graph that compares the average scores of the experimental group before and after the test. The average score before the intervention was 6.6, while the average score after the intervention rose to 14.2. The graph shows that the bar for the post-test is significantly higher than the bar for the pre-test, indicating an improvement in the participants' performance. The visual representation indicates that the peer tutoring program positively affected the social skills of children with intellectual disabilities in an inclusive educational environment.

Table 3: Mean standard deviation, CR analysis of pre-test and post-test of the experimental group

TEST	N	MEAN	STANDARD DEVIATION (SD)	DF	CR (CALCULATED T-SCORE)	TABLE VALUE	LEVEL OF SIGNIFICANCE
PRE TEST	5	6.6	2.3	4	5.93	2.78	0.05
POST TEST	5	14.2	4.55	4			

The calculated CR value of 5.93 is higher than the table value of 2.78 at the 0.05 significance level. This suggests that the rise in post-test scores is statistically significant. Peer tutoring helps improve social skills in children with intellectual disabilities.

Objective 3: To compare the pre-test and post-test scores of controlled groups for the effect of peer tutoring on social skills among students with intellectual disabilities in inclusive education.

Table 4: Pre-test and post-test of the control group.

CONTROL GROUP				
S.no.	Name	AGE	Pre-test Score	Post-test Score
1	C1	11	6	8
2	C2	13	5	8
3	C3	8	6	7
4	C4	14	8	9
5	C5	10	5	9
Total score			30	41
Average score			6	8.2

Fig. 3—Pre-test and Post-test Mean scores of the control group

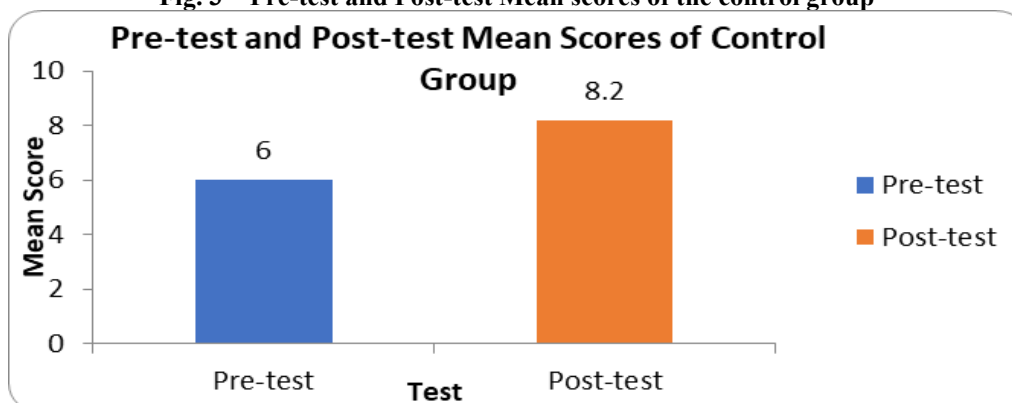


Table 4 shows a comparison of the control group's performance on pre-tests and post-tests to assess changes in social skills during the study period, excluding the peer tutoring intervention. The five participants received a combined pre-test score of 30, resulting in an average score of 6.0. Scores varied between 5 and 8. At the post-test stage, the overall score rose to 41, leading to an average score of 8.2. The scores on the post-test varied from 7 to 9. The average score after the test was higher than the average score before the test, but the increase was slight. The control group demonstrated only slight progress in social skills when compared to the experimental group. The results indicate that regular classroom teaching led to only a small positive change, while the lack of peer tutoring limited more significant progress in the social skills of children with intellectual disabilities.

Table 5: Mean standard deviation, CR analysis of pre-test and post-test of the control group.

TEST	N	MEAN	STANDARD DEVIATION (SD)	DF	CR (CALCULATED T-SCORE)	TABLE VALUE	LEVEL OF SIGNIFICANCE
PRE TEST	5	6	1.22	4	3.79	2.78	0.05
POST TEST	5	8.2	0.84	4			

Table 5 shows that the control group has an average difference of 2.2 between their pre-test and post-test scores. The Critical Ratio (CR) has been determined to be 3.79, which is higher than the table value of 2.78 at a significance level of 0.05 with 4 degrees of freedom. This indicates that the difference in scores between the pre-test and post-test is statistically meaningful. The progress is not as notable as that observed in the experimental group, suggesting that standard classroom teaching has a limited effect on the growth of social skills.

Objective 4: To compare the post-test score of the experimental and controlled group for the effect of peer tutoring on social skills development among students with intellectual disabilities in inclusive education.

Table 6: Post-test score of experimental and control groups.

EXPERIMENTAL GROUP					CONTROL GROUP			
S.no.	Name	Age	Peer Tutor	Post Score	S.no.	Name	Age	Post Score
1	E1	10	P1	15	1	C1	11	8
2	E2	12	P2	18	2	C2	13	8
3	E3	13	P3	10	3	C3	8	7
4	E4	14	P4	19	4	C4	14	9
5	E5	14	P5	9	5	C5	10	9
TOTAL SCORE				71	TOTAL SCORE			41
AVERAGE SCORE				14.2	AVERAGE SCORE			8.2

fig. 4: Post-Test Mean Score of Experimental Group and Control Group

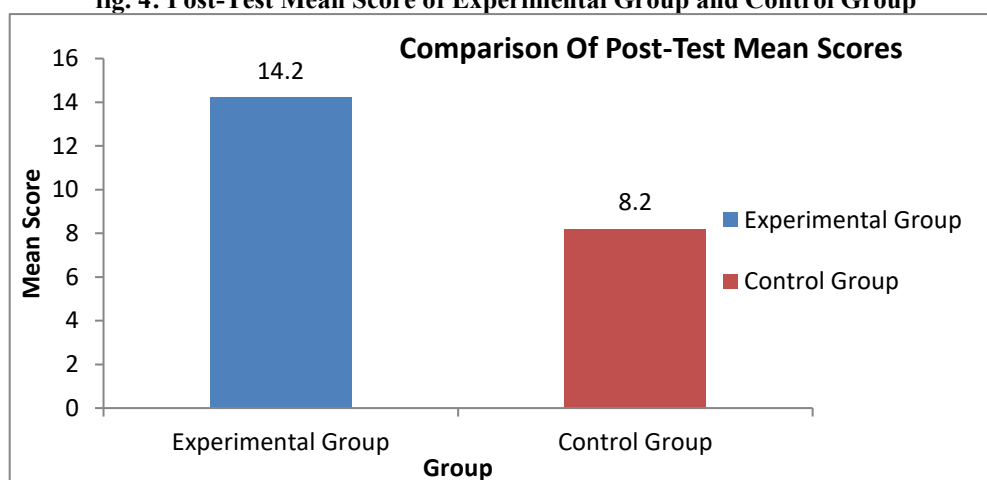


Table 6 shows that a comparison of post-test scores for the experimental group and the control group in a study that investigates how peer tutoring affects the development of social skills in children with intellectual disabilities in an inclusive educational environment. The experimental group scored higher on the post-test than the control group, indicating that they demonstrated more improvement in social skills after the intervention. The experimental group had an average post-test score of 14.2, compared to an average score of 8.2 for the control group. The scores for the experimental group were between 9 and 10, while the scores for the control group ranged from 7 to 9. This suggests that students involved in peer tutoring showed greater social interaction and engagement.

Figure 4 indicates that the average post-test score for the experimental group is greater than that of the control group. This suggests that peer tutoring had a beneficial effect on the development of social skills in children with intellectual disabilities in inclusive classrooms. The difference observed in the average scores of both groups indicates that the intervention was successful. A t-test was performed to assess whether this difference is statistically significant, and the results are presented in the table.

Table 7: Mean standard deviation and CR analysis of and post-test of the experimental and control groups.

TEST	N	MEAN	STANDARD	DF	CR	TABLE	LEVEL OF
			DEVIATION		(CALCULATED		
			(SD)		T-SCORE)	VALUE	SIGNIFICANCE
POST TEST(E)	5	14.2	4.55	4	3.03	2.78	0.05
POST TEST(C)	5	8.2	0.84	4			

Table 7 shows a comparison of the post-test scores between the experimental group and the control group. The experimental group has an average score of 14.2, whereas the control group has an average score of 8.2. This indicates that students in the experimental group performed better after the intervention compared to those in the control group. The standard deviation of the experimental group is 4.55, suggesting that there is some variation in the scores. The control group has a standard deviation of 0.84, indicating that their scores are more consistent, although they tend to be lower overall. The Critical Ratio (CR) test was employed to assess whether this difference is statistically significant. The calculated CR value is 3.03. The study has 4 degrees of freedom. The table value for a significance level of 0.05 is 2.78. The calculated CR value of 3.03 is greater than the table value of 2.78, suggesting that the difference in post-test scores between the experimental and control groups is statistically significant. Consequently, the null hypothesis, which states that there is no significant difference between the two groups, is rejected. Peer tutoring has a beneficial effect on the social skills development of children with intellectual disabilities in inclusive educational settings

III. Summary of the Study

This study investigated how peer tutoring influences the development of social skills in students with intellectual disabilities within inclusive education settings. Inclusive education seeks to offer the same learning opportunities to all students, regardless of any disabilities they may have. Students with intellectual disabilities frequently face challenges in communication, collaboration, interactions with peers, expressing emotions, and participating in classroom activities. Peer tutoring was chosen as a teaching method because it promotes valuable interaction between students without disabilities and those with intellectual disabilities. A pre-test and post-test control group design that is quasi-experimental was used. Ten students with intellectual disabilities were chosen using purposive sampling and were evenly split into an experimental group and a control group. Five classmates who were developing typically received training to serve as peer tutors for the experimental group. The intervention involved organized peer tutoring activities, which included the Emotion Card Game, Card Exchange Activity, Waiting Turn Activity, Balloon Tap Game, Freeze Dance, Colour Sharing, Finger Painting, Sorting Object Race, Name and Clap Activity, and Pass the Object Game. Data were gathered using the Modified Functional Assessment Checklist for Programming (FACP) Social Skills Checklist. The analysis of the collected data was conducted using mean, standard deviation, paired t-test, and independent t-test.

IV. Major Findings

The research identified the following key findings:

- Students in the experimental group showed significant enhancement in social skills after taking part in the peer tutoring program.
- The increase noted in the control group was relatively minor.
- The paired t-test showed a significant difference between the scores of the experimental group before and after the test.
- The change in scores from the pre-test to the post-test for the control group was not statistically significant.
- The comparison after the test showed a notable difference favoring the experimental group over the control group.
- Peer tutoring enhanced communication skills, sharing behavior, cooperation, emotional expression, participation in class, patience, willingness to help, and interactions among peers
- Peer tutors who are developing normally also gained empathy, leadership skills, cooperation, and positive attitudes toward students with intellectual disabilities.

V. Conclusion

Based on the findings, the results indicate that peer tutoring is an effective method for enhancing the social skills of students with intellectual disabilities in inclusive education environments. The intervention provided genuine chances for communication, friendship, collaboration, and active involvement in classroom activities. Students

who participated in peer tutoring showed higher levels of confidence, better relationships with their peers, and more engagement in the classroom than those who received traditional instruction.

Peer tutoring is an affordable, effective, and sustainable method that can be easily adopted in inclusive schools without the need for costly educational materials.

Educational Implications

The findings of the study have several educational implications:

Peer tutoring should be integrated into inclusive classroom practices.

- Teachers should receive training on planning and monitoring peer tutoring programs.
- Individualized Education Programs (IEPs) should include peer-mediated activities.
- Inclusive schools should organize structured cooperative learning sessions.
- Teacher education institutions should include peer tutoring strategies in pre-service and in-service training.
- Educational policymakers should encourage peer tutoring as an evidence-based inclusive practice.
- Schools should promote positive peer relationships to enhance social inclusion and participation.

Suggestions for Further Research

Future studies may include a larger sample from different states.

- Conduct longitudinal studies.
- Compare different peer tutoring models.
- Examine the effect of peer tutoring on academic achievement, adaptive behaviour, self-esteem, and quality of life.
- Investigate technology-supported peer tutoring in inclusive classrooms.

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