

Effectiveness of Reciprocal Peer Tutoring Strategies in Improving Social Collaboration and Reading Comprehension in Students with Emotional and Behavioral Disorders in Indonesia

Siti Ma'rifah (sitimarifahma@staisa.ac.id)
Sekolah Tinggi Agama Islam Shalahuddin Al-Ayyubi

Abstract

The research conducted to check the impact of reciprocal peer tutoring (RPT) strategy on the social collaboration and achievements of reading comprehension of emotional behavioral disorders students in Indonesia. The population of the study comprises of 107 student in which 52 were males and 55 were females identified educational students with emotional behavioral disorders drawn from Indonesian universities using multistage sampling technique. In order to answer the research objectives, the data were analyzed through the mean scores and standard deviation, and also t-test was used to test the hypotheses using analysis of covariance. The key findings shown that students with emotional and behavioral disorders significantly improved their reading comprehension performance following intervention using RPT. The study also showed that gender as a factor in the study had no appreciable impact on how well students with emotional behavioral disorders interacted with others. It was therefore advised that emphasis be placed on giving students the necessary skills for using reciprocal peer tutoring in light of the study's findings. Moreover, this research could also help to the policy makers and regulatory bodies know about the importance of RBT to improve the reading comprehension achievements and social collaboration of the students.

Keywords: Control Group, Experimental Group, Reciprocal Peer Tutoring, Indonesia

Introduction

In the modern age, students are the important part for the development of nation. Students gain more success in education when they have proper knowledge about the readings strategies. The student success in reading depends on the development of decoding abilities. As per the study of Vaughn et al. (2011), reading skills include the capability to summarize sequence, infer, draw conclusions, question one, solve problems, relate prior knowledge, distinguish between facts and operation, and find main ideas. Students who have developed their reading comprehension skills are better able to understand and apply what they read (Harris, Santangelo, & Graham, 2008; Helda & Syahrani, 2022). In order to understand what one reads, one must first encode and process the text by making connections between it and previously acquired knowledge and ideas (Al Khaiyali, 2014). It's the act of trying to figure out what something you read means, or doing the work necessary to do that. When reading, readers are deprived of the opportunity to fully grasp the writer's intended meaning if it is too difficult to do so. It prevents the reader from acquiring new information, developing their skills, or even enjoying the text. Readers with low levels of reading comprehension are unable to acquire the knowledge necessary to participate fully in the society to which they belong (Mickelson, Yetter, Lemberger, Hovater, & Ayers, 2003; Nuryana, 2022). Students who struggle with reading comprehension often struggle academically. The ultimate goal of teaching reading is to help students develop the skills necessary to analyze and apply the information they encounter in written form. Indonesia Local Government Education Authority's primary school students, in particular, have a history of underachievement in subjects

requiring reading comprehension, including English language arts, mathematics, primary science, social studies, etc. (Ministry of Education, Enugu State, 2012-2016). Indonesia Local Government, Education Authority's transition examination into junior secondary schools results show that only 56%, 53%, 48%, 38%, and 35% of students passed at a level that would allow them to enter junior secondary schools in 2017, 2017, 2018, 2019, and 2020 (Ismail, Ali, & Us, 2022).

What is meant by "achievement" in this context is the degree to which a student, teacher, or educational institution has attained their intended outcomes. Fail to accomplish and you perform poorly. Students' low performance on the transition exam was linked to their lack of reading comprehension, which was in turn linked to inefficient instruction. Most teachers still rely on tried-and-true methods of delivering instruction, which has been shown to be ineffective because it lowers students' motivation to learn and produces subpar outcomes (Fidelia, 2015). Traditional methods of instruction, such as lectures and demonstrations, are content-focused and not student-centered, as stated by Kehinde (2017).

Traditional, teacher-led approaches to education are widely used in Indonesian classrooms, especially at the elementary level (Okon, 2002). He further argued that traditional methods of instruction do not provide sufficient academic challenge in comparison to more contemporary approaches. Therefore, according to Bernstein, Granneman, Lee, Manickam, and Baserga (2006), contemporary teaching methods are more efficient and engaging, particularly for any education institution. As a result of the critical role that educational institution play in maintaining the integrity of the entire educational system and fostering national development, as well as the fact that the low performance has been attributed to EBD, this situation has continued to raise concerns among educators, parents, curriculum experts, and evaluators.

A person is regarded as a minor if they have not yet turned 18 years old. The term "pupil" was first used in the Child's Rights Act of 2003 to describe a student who is undergoing intensive instruction from a teacher or tutor. Students' low performance in reading-intensive subjects like English, mathematics, primary science, social studies, etc. have prompted the hosting of a number of conferences and workshops. Consequently, several instructional strategies have been proposed to help students improve their reading and comprehension skills. Methods like the Enquiry-Discovery Approach (Ekpo, 2006) and incorporating ICT into the classroom are two examples (Olorundare, 2007). The results of the transition examinations into junior secondary schools administered by the Enugu State Ministry of Education (2012-2016) show that the problems are still prevalent, despite the theoretical and practical interest of the recommended approaches. The occurrence of school deficits as well as association difficulties in social collaboration may be the result of emotional behavioral disorders (EBD), which makes the low achievement even more concerning (Kauffman, Hallahan, Pullen, & Badar, 2018).

The inability to form and maintain healthy relationships with one's classmates and/or one's teachers is a hallmark of EBD, which are a form of disruptive and potentially disabling behavior. Numerous different signs included the incapacity to learn which cannot be explained by intellectual, sensory, as well as health complications, misbehavior or emotional responses that persist including in suitable environments, a pervasive approach of sadness and stress, and a propensity to experience

physical symptoms, aches, or irrational fears linked to individual or academic issues (Yell, Katsiyannis, & Bradley, 2017). The focus of this research is on two of these traits: problems with learning that cannot be attributed to intellectual, sensory, or other factors, and social and relational difficulties that make it hard to succeed in school (Blake, Lund, Zhou, Kwok, & Benz, 2012). The inability to learn or maintain satisfactory interpersonal relationships with teachers or peers, unrelated to intellectual or health, but instead a disability of unhealthy mind, is another way in which emotional and behavioral disorders can be understood. Some people even believe that only authoritative adults can diagnose a person with this condition (Hallahan, Pullen, Kauffman, & Badar, 2020). That is to say, the definition's application is often a matter of opinion. The “2004. Individuals with Disabilities Education Act (IDEA)” relies on a definition of this disability developed by Hallahan et al. (2020). The “Individuals with Disabilities Education Act (IDEA)” of 2004 defined "emotional disturbance" as "students with emotional behavioral disorders," a special education category under which students with atypical behavioral and emotional responses is served. Before 1999, when the

U.S. Department of Education drafted the regulations for the 1997 version of IDEA, the term "serious emotional disturbance" was used to describe this category of disability. When the United States government revised the term, it did not make any substantive changes to the definition. Only the negative connotation of "serious" should be removed from the word, and this was the sole purpose of the exercise (Blake et al., 2012). It is also helpful to have a firm grasp on a few of the concepts implicit in the federal government's definition. To qualify for special education, for instance, a student need only exhibit a single criterion from the IDEA 2004 definition. In order to qualify as emotionally disturbed, a child's academic performance must suffer. Since almost everyone goes through periods of mild maladjustment, this concept also stipulates that the feature must be manifested by the kid repeatedly, to a notable degree, or with a noticeably high level of intensity.

Dangerous and disturbing traits like aggression, disruptive behavior, and defiance may be discussed as dimensions of the difficulties faced by students with EBD. The majority of experts agree that these are the most serious and pervasive (Schiltz et al., 2018). Because they have been exposed to various types of maltreatment, children whose work as home helpers can acquire a more hostile perspective of the world, establish negative thought patterns, and engage in damaging self-talk. It's probable that kids won't develop empathy, a quality that encourages compassion for individuals and serves as a check on harmful behavior. They may come to have a low opinion of themselves, which can then feed back into their pessimistic outlook on life. Of particular interest to this investigation are the two characteristics of the U.S. Department of Education definition for this population of children: (A) a failure to learn that cannot be accounted for through intellectual, perceptual, and other variables; and (B) a failure to establish or sustain fruitful interpersonal connections. However, empirical research Galda and Cullinan (2003) shows that elementary school students with EBD show deficits in each of the five characteristics of the IDEA definition of Emotional Disorders. The IDEA lists five signs as characteristics of emotional illnesses, however empirical evidence (Moll et al., 2023; Sowa & Lacina, 2011) have discovered that kids during elementary level with EBD show deficiencies in each of these five categories. According to study conducted from Western Europe, RPT could assist adolescents with EBD in achieving academic success and interacting more amicably with their classmates (Riden,

Kumm, & Maggin, 2022; Ward, Stocker, & Murray-ward, 2006). In Indonesia, not much has been documented. A child's learning outcome could be thought of as the child's academic achievement. The success of a student, instructor, or school can be measured by their level of academic achievement or performance. Standardized tests and ongoing assessments are frequently used to evaluate students' progress in school, but there is little consensus on the most effective methods or the relative weight of different types of knowledge and abilities, such as procedural expertise and declarative knowledge (such as lists of facts) (J. Wang, Maggin, & Zarate, 2022; Ward et al., 2006). Student actions and reactions towards one another which are known as social collaboration. It's the way people respond to and interact with one another. Having a brief chat with a pal may not seem like much. But Hallett and Ventresca (2006) and Pirayvatlou, Roushan, Pirayvatlou, Majidi, and Khorshidi (2022) argued that even the most seemingly inconsequential forms of social collaboration should not be disregarded. After examining the relationship among student social collaborations inside classroom and academic results, Coleman came to the conclusion that a student's peer group affects both their social and intellectual progress. Pellegrini and Bohn (2005) stated that students' social collaborations have an impact on their performance in school from the earliest stages of their formal education. The child's academic performance and social development can be influenced by structured collaborations with his or her peers.

As per the study of Esteve (2005), "reciprocal peer tutoring" (RPT) occurs when students take turns serving as both tutors and tutees in a classroom setting. Students in this scenario take turns providing and receiving tutoring during sessions, with the teacher acting more as a supervisor than an active participant. The students interact with one another in a dynamic dialogue. Predicting, clarifying, questioning, and summarizing are the four strategies typically used to structure dialogue (sometimes referred to as the Fabulous Four; (Oczkus, 2003; Oikarinen, Oikarinen, Havu-Nuutinen, & Pöntinen, 2022). Through conversation, students in a peer tutoring program can improve their reading comprehension, learn to self-monitor, and become more motivated as a whole (Allan & Clarke, 2007). Traditional classroom teaching strategies, on the other hand, include the lecture, the story, and other time-honored practices. Pigott, Fantuzzo, Heggie, and Clement (1984) created then evaluated the RPT model on students with special education requirements. Students are put into groups of two or more and taught to encourage, monitor, and grade one another as they collaborate toward common goals using the RPT procedure. Within their small groups, the students put shifts performing as the instructor and student. Students collaborate in groups to complete tasks and earn rewards tied to group performance. To ensure that no single student is solely responsible for the group's success, RPT mandates that students receive credit for correct responses to academic tasks as they are completed by all members of the group working together (Esteve, 2005; Gómez- Leal, Holzer, Bradley, Fernández-Berrocal, & Patti, 2022).

In addition, the effect of gender on learning and socialization is yet another topic of study in the context of the rise of RPT as an instructional strategy. Whatsoever a person's biological make-up may be, Eugene and Ezeh (2016) argues that their gender is defined by their internalized perceptions of

male and female roles. Eke and Anochie (2003) also explained that the term "gender" is used to classify people as either male or female. Connell and Messerschmidt (2005) argue that men and women have fundamentally different self-concepts due to the social and cultural differences that are rooted in the widely held belief that men and women are fundamentally different because of their perceived biological differences. Despite findings from some studies showing that girls outperform boys in reading comprehension (Coley, 2001; Okpala et al., 2021). Tufekci (2008) and Davis and Warner (2018) found that girls were more socially adept than boys, while other studies found no such difference (Gnankob, Ansong, & Issau, 2022; Pellegrini & Bohn, 2005). In light of these discrepancies, the purpose of this work is to make a significant contribution to settling the controversy surrounding gender and its effect on performance and interpersonal collaboration.

The ability to understand what is read has long been recognized as crucial for students' success. Constructing meaning from texts, then analyzing and expanding upon that meaning, is a crucial skill for students to develop if they are to succeed academically. Although there is some evidence supporting the potential effectiveness of RPT in some western countries (Esteve, 2005; Uroko, 2010; H.-J. Wang, Jiang, Xu, Zhou, & Bauer, 2022), it appears that very few studies are available here in Indonesia. As literature discussed the important RPT. Therefore, Indonesia Local Government Education Authority should implement this strategy to evaluate its efficacy in helping students with EBD succeed in school and interact positively with their peers. However, students' performance in Indonesia on exams marking their entry into junior secondary education has been steadily deteriorating, making it a pressing issue. Concern among educators, parents, subject matter experts, and evaluators is warranted when low academic performance is being attributed to emotional and behavioral disorders. Based on research conducted in the West, it appears that RPT can help students adjust their emotional behavior, which in turn can boost their reading comprehension and social skills. Insufficient research has been done in Indonesia. One might ponder how RPT might influence the academic performance and social collaboration of primary school students in Indonesia who are struggling with emotional and behavioral disorders. Thus, based on previous discussion, the current research objective is to determine the effects of reciprocal peer tutoring (RPT) Learning strategy on reading comprehension achievement and social collaboration of students with emotional behavioral disorders.

This research contributed a body of knowledge in the previous that could help to other researchers to conduct their research in future. This research could also help to other policy makers and regulatory bodies to know about the importance of reciprocal peer tutoring strategy to increase the reading instruction of students. This research was comprised off in five section sections. The first section was introduction, second is literature review, third one is research methodology, forth one is data analysis and findings, and last one is discussion and future directions.

Literature Review

To be labelled as experiencing "emotional disturbance (ED)", pupils must have at minimum one of the five traits mentioned in the "federal definition of the Individuals with Disabilities Education Act (IDEA) (IDEA; U.S. Department of Education, 1998; see Table 1)". Various researches have shown

that kids with emotional and behavioral problems (EBD) exhibit deficiencies within two or more IDEA issue categories that co-occur (Cullinan & Epstein, 2001; Zima et al., 2000). While the merits of the current definition are still up for debate (Council for Children with Behavioral Disorders, 1987; (Forness & Knitzer, 1992), it is generally agreed that academic failure and relationship issues are two prominent and crippling characteristics of students with EBD (O'Shaughnessy, Lane, Gresham, & Beebe-Frankenberger, 2002)Walker The target group for this study is elementary-aged students with EBD, and empirical research has shown quantitative differences between them and their peers without deficiencies in each of those categories. Individuals with EBD having demonstrated much larger academic deficiencies (Cullinan, 2004) and essential academic survival abilities, like task-focused concentration, educational rules compliance, and behavioral patterns (Merrell, Merz, Johnson, & Ring, 1992). Additionally, they had significantly more interpersonal issues, such as rejection from peers who weren't disabled (Herman et al., 2003), difficulty getting along with others, and a lack of cooperation with peers (Gresham & Elliott, 1987). Children with EBD frequently struggle with academic tasks and social interactions, either in addition to or perhaps because of the acting-out behaviors that are frequently associated with these students (Lane, Gresham, & O'Shaughnessy, 2002).

Reciprocal peer tutoring is a well-established, evidence-based strategy that supports both fundamental academic achievement and constructive social collaboration (RPT). "Juniper Gardens Children's Project in Kansas City, Kansas," invented and has successfully used the strategy's premier example, Class-Wide Peer Tutoring (C. Greenwood, 1997). It must have been at first developed to give elementary-age at-risk and underprivileged students more chances to learn as well as practice essential learning abilities in general education classrooms who used a standardized and engaging set of instructional elements which incorporate RPT and group encouragement inside a game-like format (C. R. Greenwood, Maheady, & Delquadri, 2002). Since its inception, CWPT as well as other forms of reciprocal participant teaching, which would include "Class-wide Student Tutoring Teams and Peer-Assisted Learning Strategies", have been demonstrated to be effective at raising educational success among students from a wide range of contexts and needs, including those with attention deficit hyperactivity disorder (Baytar & Çakır, 2022; C. R. Greenwood, Arreaga-Mayer, Utley, Gavin, & Terry, 2001). Additionally, research has demonstrated that using RPT variations, students with high incidence disabilities have improved social cooperation (C. R. Greenwood et al., 2002) and school survival skills (Spencer, 2006). Additionally, those involved in peer tutoring programs—including students and teachers—have praised the strategy and preferred it to traditional teaching methods (Bell, Young, Blair, & Nelson, 1990).

A small number of research papers (Falk & Wehby, 2001; Wehby, Lane, & Falk, 2003) regardless of the fact of RPT having repeatedly proved to be successful with kids at risk of failure in school as well as those with increasing incidence impairments, it has not been employed with elementary-age students who have EBD. Although there is some evidence supporting the potential effectiveness of RPT in some western countries (Esteve, 2005; Nuryana, 2022; Uroko, 2010), it appears that very few studies are available here in Indonesia. As literature discussed the important RPT. Therefore, Indonesia Local Government Education Authority should implement this strategy to evaluate its efficacy in helping students with EBD succeed in school and interact positively with their peers. The effect of gender on learning and socialization is yet another topic of study in the context of the rise of RPT as an

instructional strategy. Whatsoever a person's biological make-up may be, Eugene and Ezeh (2016) argues that their gender is defined by their internalized perceptions of male and female roles. Eke and Anochie (2003) and (Flor et al., 2022) also explained that the term "gender" is used to classify people as either male or female. Connell and Messerschmidt (2005) discuss that men as well as women have fundamentally different self-concepts due to the social and cultural differences that are rooted in the widely held belief that men and women are fundamentally different because of their perceived biological differences. Despite findings from some studies showing that girls outperform boys in reading comprehension (Coley, 2001; Okpala et al., 2021). Tufekci (2008) and Davis and Warner (2018) found that girls were more socially adept than boys, while other studies found no such difference (Baytar & Çakır, 2022; Pellegrini & Bohn, 2005). In light of these discrepancies, the purpose of this work is to make a significant contribution to settling the controversy surrounding gender and its effect on performance and interpersonal collaborations. Indonesia Local Government Education Authority operates under the unspoken belief that men are inherently superior to women wherever it matters (Ugwu, 2009). One may postulate that socio-cultural factors which place males in various problem-solving circumstances and put females in a subservient position will have an effect on the educational progress and social collaborations of students suffering EDB who participate in RPT. According to a report published in 2000 by the American Psychiatric Association, many teachers associate the term "emotional behavioral disorders" (also known as "EBD") with a disability involving conduct disorders or with children who have been maladjusted to rules in their behaviors, both of which can hinder a child's ability to learn and succeed in school (Bhurtel et al., 2023). As a result, the current poor performance of students in reading comprehension and social collaboration, which researchers suspect to result from EBD in most "Indonesian public primary schools" and "Indonesia Local Government Education Authority" in particular, is concerning and calls for an effective instructional strategy like RPT to improve kids' educational outcomes and their social collaboration. Based on previous discussion, the current research objective is to determine the effects of reciprocal peer tutoring (RPT) Learning strategy on reading comprehension achievement and social collaboration of students with emotional behavioral disorders. Therefore, the following research hypothesis are formulated below.

- H1:** There is significant difference in the social collaboration mean scores with emotional behavioral disorders students who are exposed to RPT and those taught using conventional teaching method.
- H2:** There is a significant collaboration effect of RPT and gender on the posttest reading comprehension achievement scores with emotional behavioral disorders students exposed to reciprocal peer tutoring and those exposed to conventional teaching method.

Method

A design that was almost experimental was used for the research. A quasi-experimental research design was used for this study. The study specifically used a non-randomized control-group, pretest-posttest design. Without using randomization, KESKİN and YILMAZ (2020) asserted that a quasi-experimental study is an empirical method for determining the impact of an intervention on the population it is intended to affect. Because a true experimental research design involving subject randomization would interfere with the academic activities of the technical educational institutions

involved in the study, this design was chosen for this study. As per the study of Ezeudu and Ezeh (2008), the administration of the school used for the research hardly ever permits such random selection in true experimental design. For the study, a non-randomized group (intact classes) will also be used. As per the study of Abdullah et al. (2020), a researcher can only use a quasi-experimental research design when he is unable to randomly sample and divide his subjects into groups. He continued by stating that in a quasi-experimental research design, a pretest is given at the start of the planned study so that the results of the pretest can be used to determine whether or not the subjects in the various groups are homogenous (equivalent) to one another. Throughout this quasi-experimental research using pre-test and several post-test assessments to evaluate the efficacy of RPT, the experimental treatment factor (RPT versus control) was completely crossed only with three teachers participating (Cook, Campbell, & Shadish, 2002). The non-randomized control group pretest-posttest design is represented diagrammatically as follows: groupings: experimental and control.

Experimental group O1X O2

Control group O3—O4

O1 and O3 signify the initial observations (pretest) O2 and O4 signify the final observations

(Posttest) X signifies treatment (Research situation)

---- signifies no treatment or direct instruction

All 107 second-year (sophomore) bachelor degree students in the vocational and technical education department from the two Indonesian tertiary institutions made up the study's participants. There are 31 females and 76 males in this group. The 107 participants were taken from the respective two institutions' session registers for 2021–2022. Due to the fact that all of the students at the two institutions are very mobile, the distance between the two will help to some extent reduce interference in the experiment? The institutions are similar in terms of technology and culture as well. The researchers came up with a 30-item scale divided into two parts: Section A consists of the students' demographic information and instructions for the respondent, whereas Section B requests the school counsellors and instructors to recognize students with EBD by rating how much they agree with statements about their students. There is a four-point scale used for the identification of emotional disorders, with the responses being: strongly agree (SA = 4), agree (A = 3), disagree (D = 2), and strongly disagree (SD = 1), (SD - 1). When grading the positive items, they will be given a negative score. Students with an overall mean score of 2.50 or higher are classified as having an emotional disorder, while those with scores lower than 2.50 are not. Teachers and guidance counselors are to check the box next to the best possible response to each question. The Emotional Disorder Identification Scale (EDIS) was presented to three experts from the University of Indonesia, Indonesia in order to determine its face validity. These experts came from the Childhood Education Unit, the Educational Psychology Unit, and the Measurement and Evaluation Unit. Cronbach Alpha remain utilized for calculate the instrument's reliability coefficient for internal consistency. With SPSS, we were able to estimate a reliability of 0.77, while the instrument gave us a value of 0.78 for total instrument reliability and 0.76 for TOC form reliability. The data was analyzed using descriptive statistics (mean, standard deviation)

and hypotheses were tested using Analysis of Covariance (ANCOVA).

This section discussed the results of research hypothesis. The mean social collaboration scores as well as standard deviation of EBD students with regard to RPT vs those subjected to traditional teaching methods are shown in Table 1's data. In accordance with the findings, an experimental group of EBD students subjected to RPT used to have a pretest mean score for social collaboration of 3.20 but a standard deviation of 0.6; however, whose post-test score were 3.8 with a standard deviation of .70, providing them a mean pre- test/post-test improvement score of .65. The students from the control group who were exposed to the traditional technique had a pretest social collaboration score of 2.7 with a standard deviation of .57 and a posttest mean score of 3.20 with a standard deviation of .63, giving them a pretest/posttest mean gain score of 0.2. Revealing that RPT enhanced the social collaboration success of students with EBD, the experimental group which was subjected to RPT used to have a greater mean social collaboration post-test score compared to the control group. The experimental and control groups' standard deviations were 0.47 to 0.5, respectively, showing that respondents' replies were quite close to the mean as well as with one another, thereby validating the mean scores. This Table.1 following shows the findings that are expected.

Table.1: Pre-Test and Post-Test mean and standard deviation results

Group	N	Pre-Test		Post-Test		Gain
		Mean	SD Pretest	Post-test Mean	Standard Deviation	
Experimental	56	3.20	0.60	3.85	.70	.65
Control group	51	2.70	0.57	3.20	.63	.50

Source: Authors estimation

According to the results in Table 2, the RPT approach, as a study-related factor, significantly affects how well students with EBD perform in social collaboration. This is due to the fact that treatment's main effect's computed F- value, which is 112.20, seems to have a probability value of .000 which makes it substantial at the .05 level of significance. This suggests that giving emotionally disturbed students exposure to RPT considerably boosted their social engagement. Consequently, it is disputed that there wasn't any appreciable change in mean social cooperation scores between students with EBD who got RPT and those who received standard teaching. As a result, when comparing students with EBD who were educated utilizing RPT against those who were educated utilizing standard teaching methods, exists a substantial difference in their mean social collaboration scores on the social collaboration scale. The above discussed results are predicted in the following Table.2 below.

Table 2: Analysis of covariance (ANCOVA) Results

Source	Type III sum of squares	Df	Mean square	F	Sig
Corrected model	17.307 ^a	4	4.327	29.365	.000
Intercept	9.215	1	9.215	65.501	.000
Pre-test	.002	1	.002	.017	.628
Treatment group	14.585	1	14.585	112.229	.000
Gender	.546	1	.546	4.015	.047
Treatment group*Gender	.013	1	.013	.105	.723
Error	8.335	102	.082		
Total	663.315	107			
Corrected Total	25.753	106			

Source: Authors estimation

According to data presented in Table 3, men inside test group whose are revealed RPT learning approach had post-test mean social collaboration scores of 3.9 with a standard deviation of .173, as opposed to men inside this control group revealed to Standard approach whom have post-test mean social collaboration scores of 2.7 with a standard deviation of .486. This distinction between the two groups for men was 1.2. In comparison to females inside this control group revealed of standard approach, which had a post-test mean social collaboration scale score of 2.8 as well as a standard deviation of 0.4, the exploratory group of female’s revealed RPT learning approach had a post-test mean social collaboration rating scale of 3.8 through a standard deviation of .281. This gives a female treatment/control group difference of 1.0. The males had a higher treatment/control group difference of 0.05 than their female counterparts. Moreover, the findings demonstrate that RPT learning technique revealed males and females with in treatment group did substantially better over males and females inside this control group. These above discussed results are predicted in the following Table.3 below. Furthermore, Data on Table 2 revealed that there is not a substantial collaboration influence of RPT and gender on social collaboration of students with EBD as measured by their mean scores in Social Collaboration Rating Scale. These are demonstrated by the F-value of .017 that is not significant at 0.05 levels. The Social Collaboration Rating total values of students who experience EBD are used to evaluate social collaboration, as well as null hypothesis that there's no strong correlation impact of RPT and gender on social collaboration also isn't rejected. Consequently, there is not a substantial collaboration influence of RPT and gender on social collaboration of students with EBD as measured by their mean scores in Social Collaboration Rating Scale.

Table 3: Collaboration Effect of Treatment and Gender on the Post Test Mean Social Collaboration Scores of Students with Emotional Behavioral Disorders Exposed to Reciprocal

Peer Tutoring (RPT) and those Exposed to Conventional Teaching Method

Treatment groups	Gender of subjects	N	Post-test Mean	Standard deviation
Experimental Group	Males	25	3.9	.173
	Females	27	3.8	.281
	Total	52	3.7	.230
Control Group	Males	25	2.7	.486
	Females	30	2.8	.45
	Total	55	2.7	.5
Difference in Treatment and Control Group by Gender	Males		1.2	
	Females		1.0	
Source: Authors estimation				

Results and Discussion

Students with emotional and behavioral disorders (EBD) showed marked improvement in their social collaborations after receiving intervention using the reciprocal peer tutoring (RPT) learning strategy. This is consistent with earlier findings by Vogel-Walcutt, Schatschneider, and Bowers (2011), who compared students' self-perceptions, teachers' perceptions, and classmates' perceptions of their academic success, aptitude, social development, and peer connections. The effects of RPT on kids' academics, test scores, aptitude, social skills, and friendships were shown to be favorable. This study's results are somewhat consistent with those of two others by Cardi, Matteo, Corfield, and Treasure (2013) that also used socio-metric measures to assess the relationships between elementary school students. Two years later, in 1994, Farmer and Hollowell used a tool developed by the researchers to compare the behavioral characteristics of boys with EBD who were included in a mainstream setting (n = 18) with those of their nondisabled peers (n = 107). Students with EBD may benefit from RPT treatment because it helps them develop social skills. Boys with EBD as well as their contemporaries without EBD were not distinguished by these three metrics. Students with EBD showed no significant differences in social collaboration between the sexes when assessed using the Peer Social Collaboration Rating Scale (PSIRS), regardless of whether they were treated using the RPT learning strategy. This suggests that the improvement in students' social collaborations with others who have EBD was a direct result of the intervention using the RPT learning strategy. Ezeahurukwe (2010) Such results complement studies which revealed no gender and elaborate interrogation relationship impact on students' self-efficacy. The present study found no statistically significant gender differences in the students' social collaborations, which may be attributable to students' equal participation in a gender-blind system of peer tutoring.

The results of this study support this conclusion by showing that students with EBD who are exposed to a learning strategy based on RPT perform better on reading comprehension and social collaboration tests than students with EBD who are taught using the traditional method. Students with EBD who received RPT instruction did not demonstrate any appreciable changes in reading

comprehension or social collaboration based on gender. This led to the conclusion that students with EBD who were exposed to a discrimination-free environment involving both sexes benefited equally. Students with EBD showed no improvement in either reading comprehension or social collaboration after receiving treatment based on the RPT learning strategy. Therefore, Inside this Indonesia Local Government Education Authority of Enugu State, it must have been found that gender gap between reading comprehension proficiency as well as social collaboration among students with emotional behavioral problems was already addressed.

Conclusion

With the significance findings, the research still have some limitations that could increase new research area in future. The research was limited on Indonesia that is a developing nation which have different culture as compare to other developing economies. Therefore, future research could be conduct on developed economies to increase the research generalizability. Moreover, there was not any moderating or mediating variable in this research, a future research could be conduct with moderating or mediating variable to increase the research generalizability. Furthermore, the research was conducted on experimental research design, future research could be conduct on other qualitative and quantitative research design to increase the research generalizability.

The research has also some recommendations, for example students should be exposed to RPT learning strategy during instruction, so that they will understand their place in teaching-learning process; and in such a way take up the responsibility of learning. In order to achieve this, teachers should explain, demonstrate and model this strategy to the students; monitor the students' use of the strategy and provide them with immediate feedback and reinforcement. It also recommended that RPT learning strategy should be incorporated into teacher education curriculum/programs to prepare the prospective teachers with the skills of the strategy.

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