Use of Peer Tutoring, Cooperative Learning, and Collaborative Learning: Implications for Reducing Anti-social Behavior of Schooling Adolescents

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The study investigated the use of peer tutoring, cooperative learning, and collaborative learning as strategies to reduce anti-social behavior among schooling adolescents. The study is a descriptive survey study. The area of study was Nsukka education zone in Enugu State of Nigeria. The sample of the study was 200 teachers randomly sampled from the four towns that make up the zone. The instrument for data collection was questionnaire. The data were analyzed by the use of mean and standard deviation. The major findings of the study indicate that teachers are aware of peer tutoring, cooperative learning, and collaborative teaching as strategies for reducing anti-social behavior of schooling adolescents and that to a large extent, they are applying these strategies in their classrooms. Based on this, recommendations were made.

Keywords: peer tutoring, cooperate learning, anti-social behaviour

Introduction

Currently, there is a high increase of anti-social behavior among adolescents in schools (Igbo, 2005). Teachers are highly disturbed about it. By Grade 8, 31.5% use alcohol and 26.2% smoke cigarettes monthly, 44.2% have been in physical fights, while truancy, bullying, theft, and vandalism are common (Bruce, Morton, Crump, Haynie, & Saylor, 2011). Many of such adolescents are found in Nigerian schools. Bruce et al. (2011) noted that while low income minority youths and those who experience family dissolution are at greater risk, a large proportion of adolescents eventually engage in some form of anti-social behaviors, thus placing them at a higher risk of school failure, involvement in the criminal justice system, and health problems.

Anti-social behaviors are disruptive acts characterized by covert and overt hostility and intentional aggression toward others. They exist along a severity continuum and include repeated violations of social rules, defiance of authority and the rights of others, deceitfulness, theft, and reckless disregard for self and others (Encyclopedia of Children's Health, 2011). They may be overt, involving aggressive actions against siblings, peers, parents, teachers, authority figures, and other adults. They include verbal abuse, bullying, and hitting. When they are covert, they involve such covert behaviors as aggressive actions towards properties, such as theft, vandalism, and fire arson. Others include drug and alcohol abuse and high risk activities involving self and

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others. Bastik (2000) noted other characteristics of adolescent anti-social behaviors as absconding from home and school, disrespecting teachers, bad language, fighting, wounding, and vandalizing.

Students with behavioral problems are of particular concern in secondary and middle schools, where a contagious youth culture of academic negativism and misconduct can thwart learning and disrupt the school routine. A lot of adolescents who are poorly prepared for secondary schools are prone to anti-social influences, and if not checked or stopped, they can escalate to more criminal tendencies and other more terrible social vices. There is a need to stop it or reduce further manifestation of such behaviors.

A lot depends on early intervention. It will involve the children in learning experiences that will meet their needs. Presently in Nigeria, teachers have been teaching adolescents with anti-social behaviors together with other children, but their behaviors would not allow them to learn. They have used corporal punishments to no avail. The students have not been benefitting from the school system. Emphasis on intervention had been based on qualities of the teacher, which include interest in adolescents, teacher's resourcefulness and initiative in teaching, management, and providing teaching materials. A successful research on use of structured learning as an intervention strategy on children with disruptive behavior was carried out by Eze (2002).

To ameliorate SAAB, peer tutoring is now successfully used in developed countries. Peer tutoring can be described as an instructional system in which students teach other students (Harris, 2002). It is the process by which a competent pupil with minimal training and with a teacher's guidance helps one or more students at the same grade level to learn a skill or concept (Thomas, 2000).

Peer tutoring has to do with instructional strategy where students are taught by their peers, who had been trained and supervised by the classroom teacher. It involves having students work in pairs with another student of the same age or grade. It can be used to aid in the instruction of a few specific students or on a class wide basis. The strategy is used as supplement to teacher-directed instruction in the classroom. It is not meant to replace it. It has been extremely powerful as a way of improving student academic, social, and behavioral functioning that goes beyond typical teacher-directed instruction. When implemented in addition to teacher-directed instruction, among other things, it has led to decrease and/or prevention of anti-social behavior more than only teacher-directed instruction (Center for Promoting Research to Practice, 2011).

Many reasons had been put forward why teachers now prefer peer tutoring. Students are less likely to engage in behaviors that are disruptive or problematic. It provides students with valuable opportunities to practice their social skills in a structured environment. The teacher can then directly monitor social interaction. It provides favorable conditions for a student to become an active, self-regulated learner. O'Donnell (1999) documented that it is an effective method of instruction. According to her, reported outcome sizes have ranged from 0.4 to 2.3 *SD* (standard deviation) units when tutored students are compared to classroom instruction or other control groups. It provides chances for learners to interact verbally and non-verbally with each other. This can be in form of physical assistance, or verbally guiding another's performance of acceptable social skills. Earlier, Slavin (1980) in his studies found out that it can be integrated into the classroom organization. This is in the task. Student learning pairs are of significant interest because they manipulate the reward and task dimensions of classroom organization.

In these study to assess the effectiveness on academic outcomes of peer tutoring interventions on students with anti-social behavior, Falk, Wehby, Barton-Artwood, Lone, and Cooley (2003), Spencer, Scruggs, and Mastroprieri (2003), and Franca, Kerr, Reizt, and Lambert (1990) found out that peer tutoring is an effective intervention strategy for improving academic achievement of students with anti-social behaviors. Peer tutoring

has been shown to work for students with all kinds of special learning and behavioral needs (Delquadri, Greenwood, Stretton, & Hall, as cited in Classwide Peer Tutoring, 2011). Lone and Cooley (2003) showed that peer tutoring helps students with attention deficit hyperactive disorder pay attention longer and stay in their seats to finish assignments. It is also very helpful for students with behavioral disorder when the materials used are not too difficult. The materials need to match the students' skill levels. Furthermore, receiving or giving peer tutoring to elementary age students with behavior problems is better in school. They especially improved in reading, vocabulary, and multiplication facts. This is noteworthy because the students' anti-social behaviors do not allow them to learn, which may aggravate the behavior problem or make them drop out of school, thereby worsening the problem. In their study, Lone and Cooley (2003) used peer tutoring to teach social skills and anger control to high school students with emotional and behavioral problems. They found out that the students showed less intense anger in situations that happened during the rest of the school day.

Moreover, peer tutoring had been found to last even when a student moves to a class where the teacher is not using it. Greenwood, Carte, and Maheady (1991) found out that two years after peer tutoring was stopped, the students who had received it were still making more progress on some parts of basic skills test than students who had not been in classrooms for peer tutoring.

Peer tutoring works best when students of different ability levels work together (Kunsch, Jitendra, & Sood, 2007). Some age tutors were as effective as cross age tutors (Burnish, D. Fuchs, & L. S. Fuchs, 2005; Topping, 2008). It helps students have higher academic achievements, improved relationships with peers, improved personal and social development, and increased motivation. The teacher then has more opportunity for individualized instruction and increased facilitation of inclusion and opportunities to reduce anti-social behaviors (Topping, 2008). Cardenas, Harris, del Refugio Robledo, and Supik (2003) in their paper noted that limited English proficiency middle grade children at risk of dropping out of school became cross age tutors to elementary children. The findings showed that tutors were more likely than controls to stay in school and have improved reading grades, increased self-esteem, and improved attitudes toward school.

The above notwithstanding, Harris (2002), in his opinion, noted that breaking traditional way of teaching and changing the mindset about teaching may be difficult for some teachers. Also, some teachers might lack the skill to train their students properly to be tutors. There is the problem that it may foster disruptive behavior if not properly monitored. It can be time consuming. Untrained tutors may resort to threats of punishment and scornful put downs. Student tutors may not completely understand the material to be taught. Finally, tutees that had been labeled as less capable may resist being tutored by classmates. Though, these are the demerits, but the gains far more outweigh the demerits.

Peer tutoring can be modified and adapted to match a broad range of social skill materials. Teachers can develop and implement their own peer tutoring procedures in their classrooms and adapt it to incorporate a wide variety of materials. Good peer tutoring is reciprocal. In other words, both students have turns playing the role of a teacher and learner during the same tutoring session. The advantage is that it prevents negative feelings of always having to be the learner and feelings of superiority of always being the teacher. Excess time for teacher due to peer tutoring should be used to "float" around the classroom and monitor the students while they tutor one another. Teachers can use this opportunity to reward pairs that are working cooperatively and following procedures.

For peer tutoring to be successful, there should be 4−8 sessions that should not last more than 15 minutes. Training can start with teaching of feedback/error correction procedure. The teacher should demonstrate what

peer tutoring is like with another teacher or with a student, using simple clear materials, such as prepared worksheets, or a deck of flashcards, and developing system to request help, such as raising of hands, or raising "help" cards. There are behavior management and reward systems. The teacher should specify clear rules and expectations before peer tutoring. He/she should reward positive cooperative and appropriate behaviors during tutoring. Materials for tutoring should not aggravate problem behaviors, but demonstrate rewarding the "models" for appropriate behavior during demonstrations and set a timer which should not last more than 20 minutes. When the time goes off, let the students switch roles, they should use game formats for they are highly motivational. Once, the students are paired, they should divide the entire class into two teams and let the students total their scores at the end. The team with the most points will win a reward. Partner selection must match. They should not immediately break them up if they are not matching and use it during one class period. Learning to get along and work cooperatively is very important. If not working, they should place the students on a time out from rewards for five minutes. This is not time out on activity but a suspension of the rewards given for appropriate behavior and good performance.

The teacher should avoid putting best friends together or pair worst enemies. Teachers should interact closely with students and state specific goals to measure and examine progress. The tutors should adapt instruction to learner's pace, learning style, and understanding. Comments and corrections should be immediate. The teacher may need to pair according to how the students behave, and change the students every 2–3 weeks. This will prevent students from developing patterns of behavior or response. It will also help students to be better acquainted with some other people in the classroom. When mastered, incorporate the strategy into other class periods.

For peer tutoring to be highly effective, it requires a high level of cooperation as noted earlier. Earlier, Slavin (1980) stressed that peer tutoring has a reward structure where cooperation is at its core. Educators, researchers, administrators, and even parents are rediscovering the fact that two or more students working together learn more than individual students working alone. It involves cooperative learning.

Cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning. Class members are split into groups of 2−5 members after receiving instructions from the teacher. They then work through the assignment until all group members have successfully understood and completed it. Cooperative efforts result in participants striving for mutual benefit from one's efforts and recognizing that all group members share a common fate. They recognize that one's performance is mutually caused by oneself and one's colleague they feel proud of and jointly celebrate when a group member is recognized for achievement. There is a positive inter-dependence among students' goal attainments. Students perceive that they can reach their learning goals if and only if the other students in the learning group also reach their goals. Social skill learning and academic skills are the goals of cooperative learning.

Cooperative learning creates the atmosphere for students to increase their academic achievement as they learn social skills, such as resolving disputes on their own, helping newcomers feel welcome, taking turns, listening to others, contributing ideas, explaining oneself clearly, encouraging others, and criticizing ideas not people. The reason for improved academic achievement is that students are more active participants (Lord, 2001). They care about the class and they are more personally engaged. Other advantages include nurturing students, self-confidence, responsibility, growth of organizational skills, decision-making, experimenting, exploring, expressing feelings, empathizing, and motivation. These skills are very important in the classrooms

and later in life because no matter what kind of work students later engage in life, they must work with others. Also, the students like the subject and college better (Lord, 2001). They are more likely to make friends in class. They like and trust other students more than students who are learning individually (Lord, 2001) and have more self-esteem (Slavin, 1991). Motivated students are less likely to miss class and drop out.

Cooperative learning is different from other group learning in that it is structured to include the five essential components that make group learning truly cooperative. These are positive interdependence, face-to-face promotion interaction, individual accountability, interpersonal and small group skills, and group processing. For a teacher to use it, he/she should start it early in the term, so that the necessary interpersonal skills needed for effective cooperative learning are developed. It can simply involve a five minute class exercise or a complex project that cuts across class periods. Generally, there are key steps for successful implementation. These are pre-instructional planning, introducing the activity to students, monitoring and intervention, assessing and processing.

The teacher should first explain what the strategy is all about and discuss various researches done on it and relate the findings to the lives of students. The teacher should start as early in the term as possible to give students time to develop interpersonal skills that are needed for effective classroom group. Also, talk about situations that students can benefit from. The group size should be small. It should involve a combination of sexes, cultural groups, high, medium, and low achieving students, and students with behavior problems and motivation levels. The classroom needs to be rearranged. Groups can choose their own working spots as long as they sit face-to-face and knee-to-knee. They should encourage group to create a group spirit by developing a group identity, assign roles and make expectations of group behavior clear from the beginning, and walk around the room to observe how group members are functioning. At the end of the lesson, each group will give feedbacks on how well they had performed.

Research has shown that children who work in cooperative groups do better on tests, especially with regard to reasoning and critical thinking skills than those that are not (D. W. Johnson & R. T. Johnson, 1989). In extensive meta-analysis across hundreds of studies, cooperative arrangements were found superior to either competitive or individualistic structure on a variety of outcome measures. They generally showed higher achievements, higher level of reasoning, more frequent generation of new ideas and solutions, and greater transfer of what is learned from one situation to another.

In a review by Slavin (1991), of 67 students, it was found out that 61% of the cooperative learning classes achieved significantly higher test scores than the traditional class. The researcher noted that the difference between the more and less effective cooperative classes was that the effective ones stressed group goals and individual accountability. Greater effect is on students learning when groups are recognized or rewarded based on the individual learning of their group members. Wenzel (2000) noted that students in mixed groups (different races, genders, and learning styles) tend to have a deeper understanding of the material and remember more than those in homogenous groups. Williamson and Rowe (2002) observed that students in cooperative learning sections were more willing to ask the instructor questions (in class or through the office visits) than those in traditionally taught sections.

Cooperative learning is particularly suited to reduce anti-social behavior in schooling adolescents. For education of students with special learning needs, Slavin (1991) found cooperative learning to be effective for students with disabilities. Schools are responsible for not only improving achievement but also curbing disruptive violent and anti-social behavior.

By the very nature of cooperative learning, it discourages traditional discipline methods for controlling anti-social behavior. They only exacerbate rather than remedy problematic behavior. Chronic school failure can demoralize students, cause loss of status and rejection by peers, and destroy self-esteem and feelings of competence. These are taken care of by cooperative learning. One study found the punishment and lack of praise by classroom teachers are the main factors related to delinquent behavior. To succeed in school, students with anti-social behavior need to learn strategies for improving social performance and controlling emotion (Hawkins, 1995).

Cooperative learning had been found effective to teach coping strategies, academic, social, and life skills to anti-social adolescents. It has been shown to substantially improve behavior and reduce recidivism rates (Brier, 1994). In addition to peer tutoring, cooperative learning is effective for reducing anti-social behavior in adolescents. Adequate peer role models are needed to enhance generalization of pro-social skills. Quinn (2002) in a study examined the effectiveness of using cooperative learning to increase appropriate behaviors of young boys identified as being at risk for the development of anti-social behavior patterns. The students received a six-week cooperative learning intervention using peer role models to teach interpersonal problem-solving skills through the combined use of cognitive and behavioral techniques. The results showed a significant increase in academic performance. White (2010) in his study found cooperative learning as effective teaching strategy for reducing anti-social behavior in schooling adolescents. The implementation of cooperative learning can involve varying the groups or pairs with emphasis on different content areas or behavior skills.

Reducing anti-social behaviors requires a collaborative effort to consider and minimize individual, community, and school-based risk factors. Interaction between individuals reveals specific ways in which learning is mediated. Different kinds of interaction facilitated different kinds of learning. Research has documented the relationship between levels of discourse within a collaborating pair and the level of training of the individuals. In such a study, Harris (2002) discovered that giving detailed elaborate explanations to other students in the group is a stronger predictor of achievement for the students concerned.

Collaboration is a cooperative arrangement where two or more persons who may or may not have any previous relationship work together to achieve a common goal. Collaborative learning is an instructional method in which students' team together on an assignment. They may produce individual parts of a larger assignment individually and assemble the final work together as a team. It can be for a semester-long project with several outcomes or a single question during class (Diaz, Brown, & Salmons, 2010). It is the grouping and pairing of learners for the purpose of achieving a learning goal. It refers to an instructional method in which learners at various performance levels work together in small groups towards a common goal. The learners are responsible for one another's learning as well as their own. The success of one learner helps other students to be successful. The following are suitable for collaborative learning: case study, discussions, student-moderated discussions, debates, collaborative writing, collaborative presentation, games, and demonstrations (Srinivas, 2011).

Collaborative learning is advocated even for adolescents with anti-social behavior. It involves active exchange of ideas within small groups, which increases interest among participants. It also promotes cooperative teams. Cooperative teams achieve at higher levels of thought and retain information longer. It gives learners opportunity to engage in discussions, take responsibility for their own learning and thus become critical thinkers. Moreover, students appear more satisfied, thus boosting low self-esteem which is one of the characteristics that students with anti-social behavior lack.

To implement collaborative learning, team members need to know themselves. The students get to know concepts in depth when roles are assigned to them. Three-step interviews can be used to assign roles. They can "play" themselves by the teacher giving them interview questions or information that should be "found". They alternately interview one another. Roundtable structures may be used to brainstorm ideas and generate a large number of responses to a single question or a group of questions. All the students in a group are allowed to make responses. There is no "right" answers. The group stops when time is up. The teacher relates the questions to the course unit (Srinivas, 2011). Focused listing is used as a brainstorming technique or as a technique to generate descriptions and definitions of concepts. The students are asked to generate words to define or describe something. Also, the teacher uses structured problem-solving by having the students brainstorm or select a problem for them to consider. One minute paper is used to ask students to comment on specific questions to them. It focuses them on the content and can provide feedback to the teacher. It can also be used to start the following day's discussion.

Another technique of collaborative learning, according to Srinavis (2011), is paired annotations. The students are paired up to review or learn same article, chapter, or content area and exchange double entry journals. Students may select or be assigned roles, for example, leader, recorder, or reporter. Also, the teacher uses send-a-problem as a way to get groups to discuss or review materials. He/she used value line to form heterogeneous groups. Uncommon commonalities may be used to foster more cohesive group. Team expectations are used on the onset for the group to list behaviors expected from each individual. This is used as a check against anti-social behavior. The teachers use double entry journals for students to take notes on articles or other available resources. Guided reciprocal peer questioning may be used to generate discussion among student groups about specific topic or content area. When these techniques are combined with a number of techniques such as peer tutoring, the teacher will have a powerful cooperative learning structure.

Regardless of subject matter, students working in small groups tend to learn more of what is taught and retain it longer than when the same content is presented in other instructional formats (Davis, 1993). Students who work in collaborative groups also appear more satisfied with their classmates (Beckman, 1990; Chickering & Gamson, 1991; Goodsell, Maher, & Tinto, 1992).

The fact that peer groups have such a strong influence on behavior suggests that schools employ collaborative learning and the inclusion of anti-social students with regular students may prove most beneficial to the anti-social adolescents. By dividing the classroom into groups and explicitly stating procedures for group interactions, teachers can create opportunities for positive interaction between anti-social and other students (Encyclopedia of Children's Health, 2011).

There is need for cooperation and collaboration among special and general educators. This will ensure success for schooling adolescents with anti-social behaviors. It involves the continuous exchange of knowledge, skills, and expertise between special and general educators. For successful inclusion for all students, special educators should provide support and assistance to general educators about curriculum adaptations for students who move from the special education classroom to the general classroom. Goodsell, Maher, and Tinto (1992) developed a model for program collaboration for curriculum adaptation. There are three stages involved—development stage, implementation stage, and evaluation stage. First, they should identify the curriculum adaptations that had been working with the student, then determine curricular elements that require adaptation in general education classroom, select teaching and behavior management techniques to be used to address student needs through curriculum adaptations, develop plans to implement curriculum adaptations in

general education class, and implement plans outlined. Very importantly, the special assists in monitoring implementation of the plan. Then, they should monitor student progress and finally, evaluate the effectiveness of the plan and use selected techniques to adapt curricular elements.

In their book, Hoover and Patton (1999) developed some guidelines for the general educator. He/she should gather information related to one or more of the curricular elements that require adaptations, and then, implement curriculum adaptations on a regular basis for specified period of time. The effectiveness of the adaptations must be documented. He/she should teach flexibly to minimize problems that may result from changes that occur as adaptations are implemented, and also, explore options for curriculum adaptations with other educators, especially special education personnel. In the next step, he/she should adapt only specific areas that modifications do not attempt to change too much at a time, use different adaptation techniques to achieve appropriate education for all students, implement adaptations in a manner that ensures smooth transitions into the use of different teaching and behavior management techniques, and anticipate and account for potential problems that may arise from adaptations prior to implementation. Finally, when possible, they should use adaptations that are most compatible with existing classroom structures and routines. Emphasis is on flexibility. The general educator needs a lot of support from the special educator in the inclusive classroom. The students themselves are not left out. The teacher should monitor the effects of the adaptations by discussing them with students on a daily basis. This can be done by a self-monitoring check list. The teacher can also have his/her own behavior checklist for the students.

There must be ongoing monitoring of the program by general and special educator. This has to be in line with the summative evaluation of the effects on the desired goal which may be improved weekly by test scores, increased attention span during reading, or number of completed assignments. Above all, there should be cordial relationship existing between the special educator and general educator. Such interpersonal relationship can go along towards successful implementation of the program. Channels of communication between educators are also kept open and honest. Planning for change is completed jointly by those involved. Finally, special and general educators should respect each other's capacities for change.

The study is anchored on the constructivist theory of cognitive functioning and development (Goodsell et al., 1992). The constructivist approach emphasizes discovering learning and views knowledge acquisition as a social activity. According to Goodsell et al. (1992), human beings are capable of extending biological programming to construct cognitive systems that interpret experiences with objects and other persons. Moreover, the building of cognitive systems takes time and it is often the case that the same objective experience will be interpreted and understood differently by two adolescents who are at different points in the process of constructing cognitive systems.

Furthermore, from the model he developed to provide building blocks for the use of peer tutoring in the class, Goodsell et al. (1992) argued that peer interactions provide rich and necessary contexts for adolescents to reverse their current cognitive systems and anti-social behaviors. Reflecting on peer responses and viewpoints serves a foundation for a student to modify his/her cognitive system. Such will lead students to make new meanings. In other words, according to the theory, learning depends on equilibration—a process that involves the reconciliation of conflict between prior and newly experienced beliefs (O'Donnell, 1999). The theory suggested that development leads to learning, and in this case, learning socially acceptable behaviors as against anti-social behaviors.

Statement of the Problem

Many adolescents with anti-social behavior are found in secondary and sometimes primary schools. They are not the easiest students or pupils to handle. Due to their very nature, they make the teacher's day full, uninteresting, and unfulfilling. They will not learn, will not allow others to learn, and the teacher will not be able to fulfill the day's objectives. A lot of time and efforts are wasted by the teacher controlling behavior. Without serious intervention, the students may face serious adjustment problems and high risk of dropping out of school. It can even be a forerunner of adult criminality. The resultant frustration may lead to suicide if the problems are not well handled. If the problems are not properly treated or tackled, it may lead to a new generation of anti-social adolescents, so the cycle continues.

From the findings earlier reviewed, teachers in Nigeria had been neglecting these students/pupils and treating and teaching them as others. As such they had not been benefitting from the school system and unwanted members to their peers. Teachers had been using corporal punishment to no avail.

In developed countries, teachers had taught these children successfully using peer tutoring, cooperative learning, and collaborative learning. Perhaps, the same approaches will prove effective in Nigerian setting. A pertinent question to ask in this direction is: What would be the influence of peer tutoring cooperative and collaborative learning among schooling adolescents? To answer this research question, the researchers shall be guided by three specific research questions and one hypothesis.

Research Questions

The research questions for this paper are as follows:

(1) To what extent do teachers apply peer tutoring strategies for reducing anti-social behaviors of schooling adolescents?

(2) To what extent do teachers apply cooperative learning for reducing anti-social behaviors of schooling adolescents?

(3) To what extent do teachers apply collaborative teaching for adolescents with anti-social behavior?

Method

The study adopted a descriptive design. It was a survey of the extent of teachers' awareness of peer tutoring, cooperative learning, and collaborative learning to reduce anti-social behavior of schooling adolescents.

Sample

The population of the study consisted of all secondary school teachers in Nsukka education zone of Enugu State in Nigeria. A total of 200 teachers were proportionately drawn from the four towns that make up of the zone. In order to achieve this, a proportionate random sampling technique was adopted in selecting 20% teachers in each of the towns.

Instrument

The instrument used for data collection was a structured questionnaire titled SRABSA (strategies for reducing anti-social behavior of schooling adolescents). This was developed by the researchers through extensive review of literature and from their personal experiences as teachers and interactions with other teachers. The instrument had three main sections: The first section was on use of peer tutoring, the second

section was on cooperative learning, while the third section was on collaborative learning. The items were structured on a four-point rating scale of 4—VGE ("Very great extent"), 3—GE ("Great extent"), 2— LE ("Little extent"), and 1—VLE ("Very little extent"). This was face-validated by three experts in special education, educational psychology, and measurement and evaluation. Their constructive criticisms and inputs helped with the final production of the instrument. An internal consistency reliability estimate of 0.89 was obtained for the instrument.

Method of data collection was through direct administration of the questionnaire to teachers. The questionnaires were filled on the spot and handed over to the researchers.

The data collected from the study were analyzed by using mean and *SD*. A cut off point of 2.50 was used as decision point to reject or accept the items in the questionnaire.

Results

Research question 1: To what extent do teachers apply peer tutoring strategies for reducing anti-social behavior of schooling adolescents? (see Table 1)

Table 1

Mean Rating and SD on Extent of Teacher Awareness of Peer Tutoring Strategies for Reducing Anti-social Behavior of Schooling Adolescents

S/N	Peer tutoring strategies	Mean	*SD*	Decision
1	It is best to start small	3.39	0.801	*
2	Use during one class period	2.57	0.948	**
3	Pair in twos	3.07	0.980	*
4	Use of test scores	2.92	0.969	*
5	Use of teacher judgment	3.27	0.872	*
6	When mastered incorporate the strategy into other class periods	3.19	0.903	*
7	Set goals to measure and examine individual progress	3.34	0.948	*
8	Should not be used as punishment for anti-social behaviors	2.81	1.114	*
9	Comments and corrections are immediate	3.14	1.001	*
10	Students provide extensive help to each other	3.24	0.822	*
11	Partner selection must match	2.95	0.934	*
12	There are shared discourses	3.13	0.935	*
13	Do not immediately break them up if they are not matching	2.33	1.151	***
14	The tutor must provide relevant help	3.27	1.016	*
15	If not working, place the students on a time out from rewards for five minutes	2.85	0.978	*
16	If still not working, split the students	2.90	0.997	*
17	Avoid putting best friends together and do not pair worst enemies	3.28	1.012	*
18	Teachers interact closely with students	3.42	0.887	*
19	Tutor adapts instruction to learners pace, learning style and level of understanding	3.29	0.938	*
20	May pair according to how the students behave	2.94	1.059	*
21	Change the students every two weeks	2.88	1.000	*
22	Materials for tutoring should not aggravate problem behaviors	3.03	1.051	*
23	Once the students are paired, divide the entire class into two teams	2.38	0.982	***
24	The students total their scores at the end	3.06	1.008	*
25	Use of game formats	3.18	0.861	*

Notes. N = 200; * VGE, ** GE, *** LE.

Data from Table 1 indicate that teachers are applying peer tutoring strategies as means of reducing anti-social behavior of schooling adolescents. Apart from items 2, 13, and 23, all other items show clear awareness of such positive strategies.

Research question 2: To what extent do teachers apply cooperative learning for reducing anti-social behaviors of schooling adolescents? (see Table 2)

Table 2

Mean Rating and SD on Extent of Teacher Awareness of Cooperative Learning for Reducing Anti-social Behaviors of Schooling Adolescents

S/N	Peer tutoring strategies	Mean	*SD*	Decision
1	Cooperative learning and peer tutoring can be used together	3.24	0.908	*
2	Positive interdependence among groups	2.95	1.014	*
3	Face to face promotive interaction	2.31	1.007	**
4	Individual accountability is involved	3.00	0.927	*
5	Group members learn social skills required to work together productively	3.27	0.859	*
6	Group members must have time to discuss how well they are doing to achieve goals and maintain good relationships	3.27	0.934	*
7	Groups are taught with a combination of sexes, cultural groups, high, medium and low achieving students	2.11	0.934	***
8	Rearrange classroom to assist in promoting social skills	3.18	0.876	*
9	Groups can choose their own working spots as long as they sit face to face and knee to knee	3.00	1.073	*
10	Encourage groups to create spirit by developing group identity	3.14	0.904	*
11	Each student is assigned a role and each role will be described with a *t*-chart	2.14	0.908	***
12	Make expectations of group behavior clear	3.29	0.950	*
13	Make sure everyone contributes to the work and understands and agrees to the final product	3.36	0.795	*
14	Time the class to determine how fast and quietly they can get into their own groups	3.18	0.950	*
15	Each group gives feedback on how well they perform	3.31	0.852	*
16	Monitor behaviors to observe how each group is handling the tasks and roles	3.17	0.899	*
17	Use of observation sheets	3.12	0.903	*
18	Group members discuss and reflect on what worked and what failed	3.13	0.945	*
19	Evaluate academic and social skills	3.32	0.776	*

Notes. N = 200; * VE, ** LE, *** VLE.

Data from Table 2 clearly indicate that teachers apply cooperative learning as a strategy of reducing anti-social behavior of schooling adolescents. With the exception of items 3, 7, and 11, all the other items show that teachers are aware of the positive impact of cooperative learning to reduce anti-social behaviors of students.

Research question 3: To what extent do teachers apply collaborative teaching for adolescents with anti-social behaviors? (see Table 3)

Items from Table 3 clearly indicate that to a large extent, teachers are applying collaborative teaching for adolescents with anti-social behaviors. Apart from items 1, 3, 11, 12 and 15, all other items show that teachers had been applying collaborative teaching for students with anti-social behaviors.

Table 3

Mean Ratings and SD on Teachers' Level of Awareness of Application of Collaborative Teaching to Reduce Anti-social Behaviors of Adolescents

S/N	Peer tutoring strategies	Mean	*SD*	Decision
1	Use of case study for collaboration learning	2.07	0.964	***
2	Use of discussions	3.23	0.950	*
3	Use of student moderated discussions	3.00	0.899	***
4	Use of debates	3.06	1.003	*
5	Collaborative writing	2.91	0.877	*
6	Collaborative presentation	3.04	0.852	*
7	Games and demonstration	2.96	0.934	*
8	Knowledge of concepts in depth when roles are assigned	2.83	1.076	*
9	Use of three step interview to assign roles	2.88	1.012	*
10	Use of focus listing as brainstorming technique	2.91	0.952	*
11	Use of paired annotations	2.96	1.029	**
12	Use of uncommon commonalities	2.64	1.028	**
13	Send a problem technique	2.76	1.048	*
14	Listing team expectations	2.71	.938	*
15	Use of double entry journals	2.22	1.024	***
16	Guided reciprocal peer questioning	3.01	1.020	*
17	Combine with peer tutoring and cooperative learning	3.12	0.970	*

Notes. N = 200; * VGE, ** GE, *** LE.

Discussion

Based on the findings, one can deduce that to a large extent, teachers apply peer tutoring, cooperative learning, and collaborative learning to reduce anti-social behaviors of schooling adolescents. This was a result of the high means and *SD*s obtained. The few that did not apply these strategies did not attract high figures. This can be attributed to the fact that there is a high increase of anti-social behaviors in the school system (Igbo, 2005; Bruce, Morton, Crump, Hayuie, & Saylor, 2011; Drytoos & McCord, as cited in Bruce et al., 2011). So, from available evidence, these anti-social behaviors exist in schools and teachers have been trying their best to reduce them. Though, they had not been succeeding. The major problem is not with head knowledge but with implementation which is the crux of the matter.

Data from Table 1 show that, to a very great extent, teachers are applying peer tutoring strategies to arrest anti-social behaviors of schooling adolescents. This is not very surprising for the strategy is working in developed countries (O'Dourell, 1999; Spencer, Scruggs, & Mastroprien, 2003; Franca, Kerr, Reizt, & Lambert, 1990). It has also been effective among children with behavioral problems (Depquadri, Greenwood, Stretton, & Hall, as cited in Classwide Peer Tutoring, 2011).

Likewise, data as shown in Table 2, teachers apply cooperative learning to control or reduce anti-social behavior. The strategy has also been effective when used on students with anti-social behaviors in developed countries (Haris, 2002; Quinn, 2002; White, 2012).

Collaborative as a cooperative arrangement was applied on students with anti-social behaviors in the present study. It was found out that to a large extent teachers had been applying it. This can be seen in Table 3. Other studies also found it effective (Davis, 1993; Srinavis, 2011; Diazi, Brown, & Salmous, 2010).

From the foregoing, one can see that the three strategies used in the study were not new and that the teachers were aware of them. The problem then is the implementation. Teachers are encouraged to use them because more awareness of the strategies is not enough. They should strive to put the strategies into effect.

Recommendations

Based on the findings of the study, the researchers made the following recommendations:

(1) Teachers should strive to apply peer tutoring, cooperative learning, and collaborative teaching to reduce anti-social behaviors among schooling adolescents;

(2) Intensive training and retraining of teachers is proper implementation of peer tutoring, cooperative learning, and collaborative teaching because they work together;

(3) Teachers should be given incentives by school authorities and even parents to be able to be motivated to go the extra mile to implement the strategies so that the society and school will be better places to live and study.

Conclusion

Findings from the study clearly showed that teachers applied peer tutoring, cooperative learning, and collaborative learning to enable them to reduce anti-social behaviors among schooling adolescents. Some teachers have even started applying some collaborative techniques. From these, one can then conclude that the three strategies should not only be known by teachers, but they should actively implement them to reduce adolescent anti-social behaviors.

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