



**TO ESTABLISH PEER SUPPORT STRATEGIES
FOR DECREASING OUT-OF-SEAT BEHAVIOUR FOR
LEARNERS WITH AUTISM SPECTRUM DISORDERS
IN SPECIAL SCHOOLS, EMBU COUNTY, KENYA**

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Abstract:

The study sought to establish peer-support strategies used in decreasing out-of-seat behaviour for learners with Autism Spectrum Disorders in special schools, in Embu County, Kenya. The study used Abraham Maslow's hierarchy of needs. This theory states that the motivation of human needs is acquired at different levels. The study adopted a survey research design. The study target population were 25 headteachers, 48 teachers, 65 parents and 5 EARCS from 2 special schools and 23 special units in Embu County. Purposive sampling was employed. The sample size constituted 20% of 25 schools, 5 head teachers, 32 teachers, 10 parents, and 5 EARCs translating to 62 respondents. Questionnaires were used to collect data from the headteachers and teachers, an interview schedule was conducted on parents/guardians and an observation checklist was used to observe learners with Autism Spectrum Disorders in class. Piloting was done at St. Monica School for Intellectual Disabled to enhance the validity and reliability of the research instruments. Data were analysed using Statistical Package for Social Sciences (SPSS) computer presented program and findings were presented in form of frequency distribution tables, bar graphs and pie charts. Findings of the study revealed that most teachers have existing self-management techniques aimed at reducing out-of-seat behavior. The pupils were generally happy with the techniques the teachers had set together. Similarly, the teachers were happy to carry out the existing peer support techniques to reduce out-of-seat behavior. Most teachers strongly agreed that by observing what peers do, children develop self-efficiency. The study concluded that the use of peer support strategies play a significant role in behaviour change among children with ASD because the strategy enables them to come together, share experience and

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decide on solutions to a common challenge. The study recommended that the Ministry of Education should put in place measures to compel schools through monitoring and capacity building such as training to ensure that SNE learners' are appropriately placed. The government should allocate extra funds to public primary special schools to help them procure materials for SNE learners to prepare the schools for the implementation of SNE curriculum. Further research should be carried out in all counties in Kenya on peer-support strategies for decreasing out-of-seat behaviour in learners with Autism Spectrum Disorders. Similarly, other areas regarding learners with Autism Spectrum Disorders should be explored.

Keywords: Autism Spectrum Disorders, peer support strategies, out-of-seat behavior, peer

1. Introduction

Autism Spectrum Disorder (ASD) originates from the Greek word "auto" which denotes "self" Kanner, (1943). ASD manifests in children before they reach the age of three and interferes with the child's development, social interactions, conduct as well as communication and on a large-scale impact on the child's educational performance according to Individual with Disabilities Education Act (1997). In this regard, out-of-seat behavior is one of the characteristics of ASD that if not remediated will affect the learners' learning process.

A study on parent-mediated behavioural intervention for ASD children's challenging behaviour in Nigeria, the finding was based on the Aggression and Self Injury Questionnaire, which measured both Aggression against a Person and Property (APP) and Self Injurious Behaviour (SIB). The secondary aftermath was the mothers' knowledge of the intervention content. All outcome methods were conducted before and after the intervention. There was an improvement in the womens' knowledge of the intervention content as indicated by the post-intervention scores. The results of the interposition were welcomed with applause with (100%) wanting to refer the programme to friends whose children had the same challenges and (75%) being satisfied with the programme. Conclusions: The study concluded that using parent-mediated behavioural intervention for ASD children in Nigeria was a feasible and promising treatment for challenging behaviour (Bello-Mojeed, 2016). Therefore, behavioural intervention was found to be an essential constituent in improving services for ASD children in Nigeria. However, the above study only focused on injurious behaviour in general but this study was on behaviour management strategies for decreasing out-of-seat behaviour in Embu County, Kenya.

Peer or mutual assistance happens when individuals aid one another, according to Park (2021). According to the Social Security Administration and the Centres for Disease Prevention and Control, one out of every 50 kids has an ASD diagnosis, which many believe to be a pandemic. Children with ASD have a wide range of outcomes,

which are influenced by a variety of circumstances, including the education service they have received. Peer-mediated intervention (PMI) is an evidence-based method with several advantages and a few drawbacks. The effects of a basic PMI on the off-task behavior and work completion of four early elementary-age kids with ASD in inclusion classes were evaluated using a multiple-baseline approach among the respondents in the current study. For all four kids with ASD, the PMI reduced off-task behavior and enhanced job completion. For three of the four subjects, reductions in off-task behavior were transferable to non-treatment situations. Unlike the reviewed study, the current study focused on a larger population and used a survey design. The location of this survey was in Embu County Kenya while the reviewed study was in North America, Bethlehem which was an inclusive setup.

Ogogo (2019) conducted a research in Migori County, Kenya, on peer-mediated interventions for improving social interactions among children with Autism. The study looked at the impact of a peer buddy method on kids with ASD's social interactions, as well as peer-implemented support response training on improving social interactions in children with Autism. The research found that peer-mediated tactics such as play activities, peer buddy approaches, peer networks, and peer-implemented crucial response training improved interpersonal relationships among children with ASD. The current study focused on learners with ASD exhibiting out-of-seat behaviour in a classroom setting in Embu County, unlike the above research which was done in Migori County.

2. Objectives of the Study

To establish peer support strategies used for decreasing out-of-seat behaviour in learners with ASD

2.1 Significance of the Study

This study aimed at establishing peer-support strategies for decreasing out-of-seat behaviour of children with ASD in special schools and units in Embu County. This study may be purposeful as it may contribute towards filling the gap in knowledge on inclusivity of learning for all and also add to other previous research on the same field. The study may also be useful to tutors to learn to diversify and adjust their mode of teaching to cater for learners' differences in our special schools. Learners ought to benefit from this study in academic or co-curricular activities which could have been under-utilized because of out-of-seat behaviour, the study may help teachers develop peer teaching/learning to suit ASD learners with out-of-seat behaviour and also it may enable teachers to change their negative attitude towards them. Parents will be sensitized more to the behaviour and how to cope with it for the betterment of their children's goals. The research may serve as a foundation for future studies focusing on improving the education and lives of pupils with ASD exhibiting out-of-seat behaviour not only in Embu County but elsewhere in Kenya.

3. Procedures and Methodology

A descriptive survey was used to select samples of individuals from a known population and the findings generalized to a large population. The research was conducted at Embu County's special schools and units. Embu County is found in the eastern part of Kenya, Geographically it lies on the slopes of Mt. Kenya and is currently a regional headquarter of the former eastern province under the new Constitution of 20A purposive sampling method was adopted during the study. Purposefully sampled were head teachers, special education teachers, ordinary teachers, EARCs, educators' aids, parents, and Ministry of Education officials. A sample size constituted 25% of 25 special schools and units, 5 head teachers, 32 instructors, and 10 parents of students with ASD, 5 Earcs from Embu County's five sub-counties. The research instruments used included, Questionnaires, observation checklists, and interview schedules. The piloting of the study was at St Monica School for Intellectually Disabled. The main techniques used to analyse the data were SPSS version 20.0. To analyze the data numerically, descriptive statistics such as percentages and frequencies were used, as well as a thematic analysis approach to qualitative information from the interview schedule and observations.

4. Results and Findings

This study sought to investigate the extent to which peer strategies for decreasing out-of-seat behaviour for learners with Autism Spectrum Disorders in special schools and units in Embu County, Kenya. To achieve this, teachers, EARC, pupils and parents were subjected to analysis and presented in form of figures and tables.

Table 1.1: Sampled Population

Sub-county	Teachers	Parents	EARC	Pupils observation
Embu West	7	2	1	2
Embu East	6	2	1	2
Embu North	6	2	1	2
Mbeere North	6	2	1	2
Mbeere South	7	2	1	2
Total	32	10	5	10

The researcher sampled 32 teachers distributed per the sub-counties, 10 parents two per each sub-county, 5 EARCs from all the sub-counties, 10 pupils with Autism Spectrum Disorders 2 per sub-county, the sampled size was 63 respondents, including the 5 headteachers in sampled schools the sample size was selected from a total of 143 targeted participants.

4.1 To Establish Peer Support Strategies Used for Decreasing Out-of-seat Behaviour in Learners with ASD

The fourth objective of this study sought to establish peer support strategies used for decreasing out-of-seat behaviour in learners with ASD. Findings were summarized under the following sub-sections.

A. Use of Peer Support Strategy in Class

Teachers were asked if they had existing peer support strategies used to reduce out-of-seat behavior. Figure 1.1 presents data on the use of peer support strategy in class.

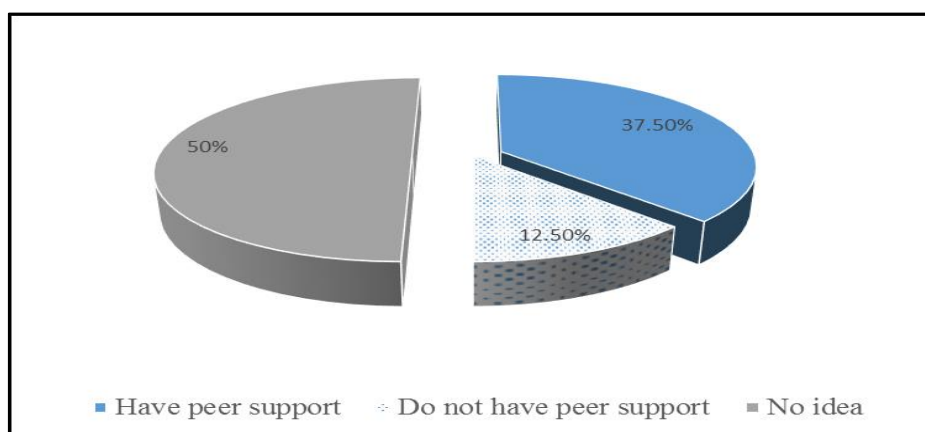


Figure 1.1: Teachers Having Peer Support Strategies Used to Reduce Out-of-seat Behavior

Figure 1.1 shows that the majority of instructors (50.0%) had no idea, 12.5% stated they did not have whereas 37.5% had peer support strategies. The result further established teachers' views on the peers' happiness in a peer strategy group as presented in Table 1.2

Table 1.2: Teachers' Views on the Peers' Happiness in a Peer Strategy Group

Opinion	Frequency (n = 32)	Percentage (%)
Happy	13	40.6
Not happy	3	9.4
No idea	16	50.0

The result in Table 1.2 established that the peers were generally happy to be in a peer support strategy group. A cross-tabulation was also done to see whether there was a link between happiness and the success of the peer support technique. Table 1.3 summarizes the findings.

Table 1.3: Cross Tabulation Table Showing Association of Happiness and Effectiveness of Peer Support Strategy

Peers happy to be in a peer support strategy group	Peer support is an effective method for minimizing out-of-seat behavior		Total
	Effective	Not effective	
Happy	13 (100%)	0 (0.0%)	13 (100%)
Not happy	0 (0.0%)	3 (100%)	3 (100%)
χ^2 value	16.00		
P -value	0.002		

Findings in Table 1.3 indicate that when the peers are happy to be in a peer support strategy group, the teachers realized that they significantly noted the group is effective in reducing out-of-seat behavior ($\chi^2 = 16.000$, $P = 0.002$). Teachers' recommendation of peer support strategy was further analyzed and presented in Figure 1.2.

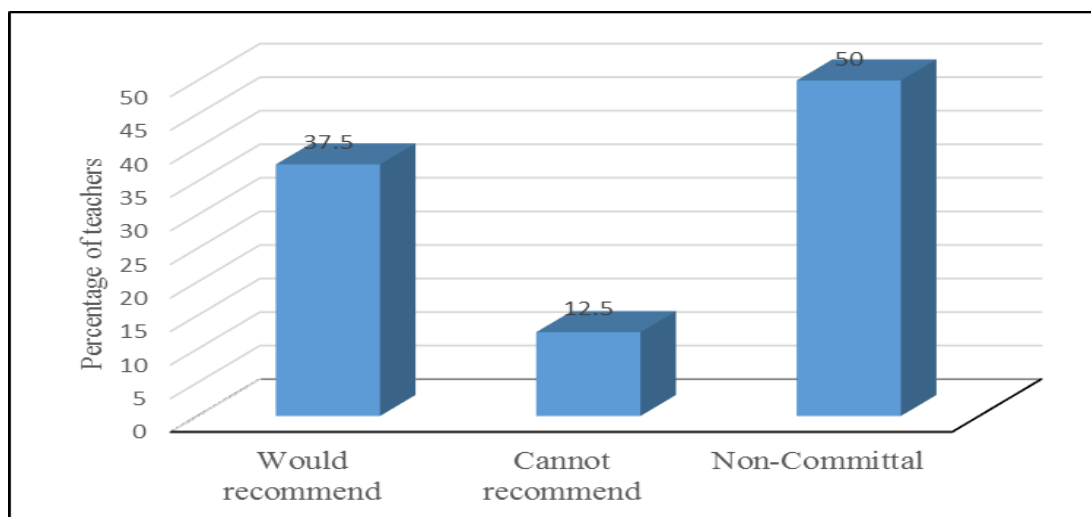


Figure 1.2: Teachers' Recommendation of Peer Support Strategy

Most of the teachers (37.5%) would generally recommend peer support strategies as a way of reducing out-of-seat behavior. Some of the teachers however would not recommend this strategy.

B. Activities of the Pupils Noted by the Teachers

Table 1.4 presents results on activities noted by the teachers.

Table 1.4: Activities Noted by the Teachers

Activity	How often			
	Always	Sometimes	Never	Non-committal
Playing in groups	5 (15.6%)	11 (34.4%)	2 (6.3%)	14 (43.8%)
Playing alone	3 (9.4%)	8 (25.0%)	7 (21.9%)	14 (43.8%)
Sharing play materials	10 (31.3%)	6 (18.8%)	2 (6.3%)	14 (43.8%)

Teachers realized that the ASD learners sometimes play together, and sometimes play alone but they always share play materials. Teachers' opinion regarding peer support strategies was further analyzed based on scale. The percentage and mean scores of each attribute were computed as shown in Table 1.5.

Table 1.5: Teachers' Opinion Regarding Peer Support Strategies

Statement	SD	D	U	A	SA	Mean response
Learners with ASD feel sure and show favorable to social homeroom practices by taking part in peer play	8 (25.0%)	5 (15.6%)	15 (46.9%)	2 (6.3%)	2 (6.3%)	2.21
Peer care assistance kids with ASD in advance communication and out-of-seat behaviour	1 (3.1%)	3 (9.4%)	19 (59.4%)	4 (12.5%)	5 (15.6%)	3.50
Children with ASD experiencing out-of-seat behaviours when engaged in activities with others are likely to initiate, develop and maintain friendships	-	7 (21.9%)	19 (59.4%)	2 (6.3%)	4 (12.5%)	3.16
Children's perceptions of early friendships help them know how to interrelate with other individuals in and outside of the school environment and later in life	1 (3.1%)	3 (9.4%)	19 (59.4%)	4 (12.5%)	5 (15.6%)	3.47
Children learning through peer support services gives them a chance to gain direct experience in causing associations between what they do to realize and apply all things considered coexistence in the wider society	-	4 (12.5%)	18 (56.2%)	6 (18.8%)	4 (12.5%)	3.53
Peer support strategies nurture children's relationships with others and significant people in the wider society.	-	1 (3.1%)	18 (56.2%)	7 (21.9%)	6 (18.8%)	4.13
Through peer support, children make their own decisions and solve problems	3 (9.4%)	-	18 (56.2%)	6 (18.8%)	5 (15.6%)	3.53

Findings in Table 1.5 indicate that peer support strategies nurture children's relationships with others and significant people in the wider society (mean response 4.13). They noted that Children learning through peer support services gives them a chance to gain direct experience in causing associations between what they do to realize and apply all things considered coexistence in the wider society (mean 3.53). During peer care assistance kids with ASD advance communication and out-of-seat behavior (mean 3.50). These findings mean that peer support strategies play a significant role in behaviour change among children with ASD because the strategy enables them to come together, share experiences and decide on solutions to a common challenge. These results are in line with those of Ogogo (2019), who found that peer-mediated techniques such as play activities, peer buddy approaches, peer networks, and peer-implemented crucial response training improved interpersonal relationships in children with ASD.

The findings were further backed up by a report from the Health Resources and Services Administration and the Centers for Disease Control and Prevention (2013), which found that the PMI reduced off-task behavior and boosted proven capabilities for all four children with ASD. It was, however, established that teachers do not agree that Learners with ASD feel sure and show favorable to social homeroom practices by taking part in peer play (mean 2.21).

C. Action to Assist Students with ASD in School

To assist students with ASD in schools, 65.6% of the teachers felt there is a need for practical teaching methods while 6.3% feel there should be theory. The evaluation tools need to include more learning aids, schedule Autism detection in early childhood, checklist observation and question and answers sessions.

Table 1.6: Action to Assist Learners with Autism Spectrum Disorders

Teaching method	Frequency	Percentage (%)
Practical	21	2
Theory	2	6.3
Non-committal	9	28.1

Support services teachers use for ASD learners include; improvised items, chairs, diet intervention, providing the play items they prefer most multidisciplinary, physiotherapy, counselling, occupational therapy, and teacher aides.

D. Observation checklist for the pupils

An observation on pupils' behavior in class and the findings were summarized in Table 1.7.

Table 1.7: Pupils Behavior in Class

Pupils behaviour	Share tokens	Do not share tokens	Comments
Expect others to know his other thought, experiences and opinion	4 (80.0%)	1 (20.0%)	Has no speech. Always expect attention from others
Doesn't associate with peers	4 (80.0%)	1 (20.0%)	She went to hide in the school shamba. Rarely participate in play games. Plays alone
How best is the learner usage on visual support materials	1 (20.0%)		For a short while and mind wonders off. Not actively used. It is difficult to observe.
Sharing of tokens economy with other learners	1 (20.0%)	3 (60.0%)	Always refuse to release anything. Posses the token
Use of peer support strategies	4	1	When going to take snacks.

	(80.0%)	(20.0%)	Does not accept any correction
Always showing out of seat behaviour	2 (40.0%)	1 (20.0%)	Always restless and likes to go out. Rarely sit. Have low concentration span.

Findings in Table 1.7 indicate that during the observation, the research finding revealed that 80.0% of the pupils expect others to know his/her other thought, do not associate with peers and 80.0% use of peer support strategies. Out of the five pupils observed, 60.0% do not share the tokens economy with other learners. The findings imply that despite the observable change in behaviour after interventions, a total transformation in behaviour was not accomplished as children with ASD would rarely sit, like going out and are characterized with low concentration span. According to Fleury et al. (2014), persons with ASD often participate in repeated behaviors or routines. The presence of these repeated behaviors in autistic people is ascribed to a dysfunction in their executive functioning system. Executive functioning governs an individual's behavior; failure in this area jeopardizes an autistic person's capacity to self-regulate activities.

5. Conclusion

Peer support strategies used for decreasing out-of-seat behaviour in learners with Autism Spectrum Disorders in Embu County. Teachers were asked if they had existing peer support strategies used to reduce out-of-seat behavior. The result further established that the peers were generally happy to be in a peer support strategy group. The teachers realized that they significantly noted the group is effective in reducing out-of-seat behavior. Most of the teachers would generally recommend peer support strategies as a way of reducing out-of-seat behavior. Some of the teachers however would not recommend this strategy.

5.1 Recommendations for Further Research

Given the study's shortcomings, the researcher advises more research in the following areas:

- 1) The research was limited to public primary special schools in Embu County, with no consideration given to neighboring counties. Private special schools and units were also excluded from the research. Comparable research should be conducted throughout the rest of the nation, including the private sector.
- 2) The research also addressed educators, head teachers, parents, and EARCs while excluding students and siblings of special needs children whose perspectives may have aided in building classroom management tactics such as peer support and token economy for ASD students. Comparable research including these stakeholders should be conducted.

- 3) More study is needed to establish the efficacy of exposure, response, and prevention (ERP) as a therapy method for minimizing disruptive behaviors to learning.

Conflict of Interest Statement

We wish to confirm that there are no known conflicts of interest associated with this publication.

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