

Effects of Mainstreaming Learners with Autism on Their Educational Experience in Public Primary Schools in Nyamache Sub County, Kisii County, Kenya



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ABSTRACT: The purpose of this study was to determine the effect of mainstreaming among autistic learners on their educational experiences in primary schools in Nyamache sub-county, Kisii County, Kenya. The study specifically was guided to address the following objectives; to assess the effect of Peer Interaction on educational experience of learners with autism, to find out the effect of learner's Self-management on educational experience of learners with autism, to assess the effect of Antecedent Procedures on educational experience of learners with autism and to examine the effect of Peer-Mediated Interventions on educational experience of learners with autism in primary schools in Nyamache sub-county. A descriptive survey design was adapted in this study. The researcher used purposive sampling to select the 11 mainstreamed schools out of 102 primary schools with ASD learners. The 11 head teachers from these schools and also the 36 SNE trained teachers were selected as the subject of the study totaling to 47 respondents. Structured questionnaires, and observation schedules were formulated to collect the required data. Data was analyzed using both descriptive and inferential statistics. Descriptively, frequency and percentages were used while for inferential statistics the Spear-man correlation and chi square test were used. The results revealed that the application of the four strategies played a significant role in improving the education experiences of the ASD learners in the mainstream schools. It was established that most of the respondents agreed that; peer interaction played a very significant role in enhancing education experience of learners with ASD. Similarly, majority of the respondents indicated that learner's self-management, use of antecedent procedures and the peer mediated learning were also important strategies for enhancing education experience of the ASD learners. Further analysis using the chi square test of association and spearman correction revealed that there was a very significant association between the selected strategies for the study and educational experience of the ASD learners in mainstream primary schools. The study concluded that mainstreaming assists the learners with ASD as they learn new skills from their peers and hence their educational experiences are improved effectively. Based on the findings of the study, it is recommended that mainstreaming should be improved in all schools in order to accommodate learners who are challenges. Besides, teachers and other stakeholders in the Ministry of Education Science and Technology (MOEST) should take center stage to assist in recommending strategies on how to handle diverse learning in classroom.

KEYWORDS: autism spectrum disorder (ASD), Mainstreaming, Peer interactions, Self-management, Antecedent procedures, Peer-Meditated Interventions

I. INTRODUCTION

Individuals with Disability Education Act [34], defines autism as a developmental disability significantly affecting verbal and non-verbal communication and social interaction, generally evident before age 3, that adversely affects a child's educational experience. Autism spectrum disorder (ASD) is one of the most common childhood neurological [1], which is characterized by problems in communication, social development, ritualistic behavior and resistance to change (American Psychiatric Association, 2012). Although ASD varies significantly in character and severity, it occurs in all ethnic and socioeconomic groups and affects every age group. Autism has also been defined as a neurological disorder that typically appears during the first three years of life and causes discrepancies or differences in the way information is processed [43]. The five disorders associated with Autism Spectrum Disorders (ASD) are Autistic Disorder, Retts disorder, Childhood Disintegrative Disorder, Asperger's Syndrome, and Pervasive Developmental Syndrome (not otherwise specified). In all the five areas, an individual experiences impairment in multi-functioning areas.

Sansosti and Sansosti (2012) noted that, the number of children with autism is increasing in the mainstreamed classroom and this calls on the teachers to be much involved in understanding autism [58]. Hughes, Katsiyannis, McDaniel, Ryan & Sprinkle

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(2011) noted that the prevalence of autism spectrum disorder, (ASD), has been on the rise and it is estimated that out of every 110 children at least one has ASD. When ASD was found eligible for IDEA service, there were 5,415 learners receiving these services which only represents less than 1% of all learners with disabilities [29].

McGillicuddy and O'Donnell, (2013) noted that teaching children with ASD may need specific approaches that are unfamiliar to regular teachers. This calls for appropriate strategies that can be used to cater for such aspects as child's age, setting of the classroom and general school environment. It is consequently, fundamental to equip teachers with as many strategies as possible. Whereas teachers, nevertheless, perceive that these strategies would make a positive difference to their practice in classrooms, most of them lack the skills and knowledge to adequately support these children and to meet their full range of needs [45].

Countries such as USA and Britain have put mainstreaming schools in place to impress the program of ensuring that regular institutions are ready to incorporate learners who are disabled [29]. In China, the education for children with disabilities was addressed by law to protect and safeguard the rights of individuals with disabilities. In practice, learners with disabilities, including autism, in mainstreamed schools use the same curriculum as all other learners, but are exempted from taking tests designed for their typically developing peers [61]. However, this practice impedes the proper documentation and assessment of behavior and educational progress for learners with autism in China.

According to Elsabbagh et al. (2012), ASD accounts for 4.97% of all learners with disability, in African countries. The prevalence of ASD in these African countries is difficult to establish due to the lack of research and lack of healthcare or educational professionals with knowledge and expertise to identify ASD in learners [15]. Kalabula, (2010) noted that the provision of special education and rehabilitation services among sub-Saharan African schools is impeded by such factors as lack of learning and other support resources, limited teachers, and teacher training facilities. This calls for appropriate strategies to be adopted by the schools and the teachers if the mainstreaming concept is expected to work effectively [35].

In South Africa, introduction of mainstreaming education was a direct response to Act 108 of 1996, which states that, implementation of mainstreaming education in South Africa is guided by Education White Paper 6 (Department of National Education, 2001). The National Department of Education prepared the draft guidelines to be used or followed in the performance of certain tasks for the implementation of mainstreamed education. In Zimbabwe, there is no specific legislation for mainstreamed education [47]. However, a number of government policy issues are consistent with the intent of mainstreaming education for example Zimbabwe Education Act (Education Act, 1996). The Disabled Persons Act 1996 of Zimbabwe requires that all learners, regardless of race, religion, gender, creed and disability, have access to basic or primary education up to grade seven. Any school which refuses to enroll a child on the grounds of disability is in violation of Disabled Persons Act (1996) and faces disciplinary action from the District Education Office.

In Kenya, autism is a disorder that is not well-known or understood. Traditionally, autism was seen as a psychiatric disorder, a curse or a consequence of witchcraft. Most children with autism were usually hidden away in homes, locked behind doors, or chained for life. Others were brought up in isolation, mental hospitals or in jails and other corrective custodial institutions [51]. Though cases of children with ASD is on the increase, the subject has received very little attention from the society and more so from the education systems. The government has put little effort into establishing mainstreamed schools or services for children with developmental disabilities such as ASD [60].

Mbwilo, Smide, and Aarts (2017), noted that many families with learners who have developmental conditions expressed concerns of their learners not benefiting from the school institutional setup, because there are no specialized resources and strategies needed to assist these learners achieve educational experience [44]. In 2003, a group of parents led by Felicity Ndungu decided to form the Autism Society of Kenya (ASK) that lobbies for autism to be classified as a category on its own and in the same year the, Ministry of Education acted on the parents demands and established the first public special unit for children with autism at City Primary School in Nairobi [51]. A similar scenario is seen among schools in Kisii County where children with these developmental conditions are included in the mainstream schools which lack the required infrastructure to cater for their special needs. Currently there are 11 mainstreamed schools with these learners but they still lack the appropriate teaching and learning resources to support the teachers and these ASD learners.

Since the adoption of the Universal Declaration of Human Rights (United Nations, 1948), a human rights and social justice agenda has guided educational policies of several countries and the United Nations [53]. Entrenched within this agenda, the educational policies of several countries mandate the rights of all learners to equal valuation as members of the mainstream school education system regardless of their differences, including disability, religion, race, ethnicity, culture, gender, social and economic status, ability and health [30]

Consistent with these systemic movements in the educational systems, the Kenyan government adopted the World Declaration on EFA in Jomtien, Thailand in 1990. The aim of this declaration was to make primary education available to all learners, and to significantly reduce adult illiteracy. The declaration affirmed that access to education is a fundamental human right, and developed specific goals to meet basic learning needs by the year 2000. The goals included: universal access to education, educational equity, a focus on learning outcomes, expanding the scope of basic education, improving learning environments, and

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strengthening partnerships in education. These goals were not met by 2000, and served as the impetus of the Dakar Framework for Action [7]

Mainstreaming is viewed as a value system which enshrines the entitlement of all learners to equal access to learning, achievement and the pursuance of excellence in all domains of their school education [4]. Mainstreaming of children with special educational needs in mainstream schools has been the subject of ongoing research and discussion in recent decades. Mainstreaming as a concept is concerned with the provision of education throughout the learner's world. Its most important condition is the transformation of schools into ready-made structures so that they can integrate all kinds of learners [5]. However, a few years before the discovery of the concept of integration, we were confronted with the social stigma of "abnormal" learners, as society called it. During the 20th century through continuous developments in psychology, in sociology and educational science the learner becomes the center regardless of the emotional, physical and cognitive development where it is. Thus, for the first time in the mainstream school, mainly in foreign countries, we have the emergence of the concept of integration of "disabled" children [20].

Mastrogiannis, and Xanthopoulou, (2015) noted that the theory of mainstreaming indicates that all learners with disabilities should attend the same classroom as their classmates. Each learner has their own educational needs and capabilities, which require a specific educational program [42]. The mainstreaming of learners with autism in general school is an issue where it is controversial and there are many views on the issue. The mainstreaming of children with autism creates many challenges and issues that need to be addressed. Similarly, Panteliadou, Filippatou and Xenakis, (2013) noted that learners with autism face many problems when entering mainstream school. The risk of poor school adaptation for these learners exacerbates the poor adaptive behavior of these learners and thus integration becomes more difficult. The mainstreaming of these learners in the mainstream school depends mainly on the will, mood, knowledge, perceptions and skills of the teacher [52].

In Kisii county and specifically in Nyamache sub county, there are only 11 mainstream primary schools among the 102. These schools are very few considering the population in the area and also the number of learners with various challenges who need to attend school. The schools are also poorly equipped in terms of the qualified teachers and the required infrastructural facilities. According to the county Education office reports, many learners with disability are out of school simply because the schools are unable to accommodate them. Lack of trained teachers makes it difficult to identify the cases that need attention and employ the right strategies to assist the learners cope up with the rest. Documented evidence on the situation of the ASD learners in Kisii county are lacking and hence the need for this study to determine the effects of mainstreaming learners with autism on their educational experience in public primary schools in Nyamache sub-county, Kisii county, Kenya.

Disability remains one of the main challenges of education in Kenya. ASD is one of the challenges that has been given very little attention in our Country Kenya and more so among education researchers. Kenya has subscribed inclusion policy to make it possible for the learners with disability to access education. However, the number of children with disability who are accessing education still remain very low. The concept of mainstream schools to accommodate these learners and particularly those with ASD is among the most complex and poorly conceptualized domains of education. The practice of mainstreaming is, nevertheless, not the simple application of particular pedagogical methods. It is hinged on so many factors including attitudes, knowledge and skills of teachers, parents and the peers. In Nyamache sub county mainstreamed schools are very few (only 11) and struggling to successfully and effectively have the system work for learners with ASD. Out of the 11 schools the number of learners with ASD is less than 2% of the population. The available teachers in these schools lack the relevant skills in identifying and handling the ASD learners. The data given by EARCs and MoE official of Nyamache sub-county shows that a most of the teachers in the schools have training in four disability areas; Hearing Impairment, Visual Impairment, Mental Disability and Physical Disability. The report indicates that on average only 2 teachers are trained in Autism and other Emotional and behavior disorders in the schools. This makes it difficult for the teachers to effectively meet the educational needs of these learners. Hence putting their educational achievement at stake. Many of them are therefore forced to stay away from school for lack of proper guidance. Understanding how various strategies affects their educational achievement of ASD learners was therefore a matter of concern for this study. It is for this reason the current study intended to fill this gap in the literature to establish the effects of mainstreaming learners with autism on educational experiences in public primary school in Nyamache sub-county.

II. LITERATURE REVIEW

A. Effects of Peer Interaction on Educational Experience of Learners with Autism in Public Primary Schools

As mentioned previously, forming a social relationship is very difficult for learners with autism. They may lack in social skills such as self-control and knowledge of social rules, such as turn taking in a conversation. Learners with autistic behaviors often need to be taught peer interaction so that they learn to initiate and respond to peers under minimal adult involvement and generalize these skills to other peers and new situations [52]. Learners with autism are likely to learn and interact effectively with their able peers when they are guided by a teacher. One strategy to teach interactive play is through the use of picture activity

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schedules, where pictures are taken for teaching steps of playing with a particular activity, such as a puzzle. This way, learners with autism can refer to the schedule to help them complete the activity appropriately [14].

A study done by Watkins, Ledbetter-Cho, O'Reilly, and Garcia-Grau, (2019) on interventions for learners with autistic disabilities in mainstreamed settings, it was noted that selecting activities are well defined in terms of time, will help improve on the level of interaction between the autistic learners and the other able learners. Environmental arrangements to promote peer interaction, such as pairing learners with and without autism and designing interactive play activities such as role play, are important. Furthermore, learners with developmental disabilities exhibit increasing levels of play when they are with typically developing learners than with other learners who have developmental disabilities [31].

According to Fein and Dunn (2007), as the goal of mainstreaming is to encourage independence of learners with autism in the classroom, an approach to achieving this goal is to utilize typically developing peers to support the educational and social functioning of the learners to reduce the need of adult attention. Peer interaction strategies involve typically developing peers, such as peer mentors, tutors, or recess buddies to teach learners with autism social skills. Peer involvement is a good strategy to teach learners with autism to behave in a manner that resembles their peers and can also result in their peers having a more accepting attitude towards learners with autistic behaviors. Fein and Dunn (2007), further noted that peer interaction approach is most effective when peers are supervised and taught ways to interact with the learner with autistic disabilities rather than being told to just play with them. To help solve this challenge, there is need to ensure that there is effective interaction among the peers in order to effectively assist the ASD learners learn from them positively [16].

Harrower and Dunlap (2011) indicated that having a peer-tutor work with autistic learner in educational tasks will allow the peer tutor to offer help, instruction and feedback. Implementing peer-tutoring has been shown to increase on-task behavior, Educational experience, and social interactions of autistic learners in mainstreamed classrooms [27]. Fein and Dunn (2017) on the other hand noted that learners with ASD condition can also benefit from having a peer mentor, as they engage with the able learners during play and communication with others, model appropriate social behavior, and reinforce social rules and problem solving through reminders or discussions. It is important for educators to know that they should not designate the same person to be a peer-tutor or mentor, as the learner with Autism will not learn to generalize their social skills with other peers or situations. For this reason, teachers should provide social skills training for the entire class so that all can learn how to interact appropriately with each other [16].

Hundert (2009) supported the idea of a class wide approach as a strategy for peer interaction, by noting that in a first-grade classroom where the entire class was taught how to initiate interaction, give and receive compliments, helping others, including others in activities, sharing and taking turns for some few minutes, four times a week it showed a remarkable improvement in the interaction of the peers in the classroom. Once social skills training was complete after three weeks, the learners were observed to check how they socially interacted during free-play. Those who showed effective interactions with their peers were rewarded by being given stars as reinforcement for the good deeds. It was observed with time that both the learners with Autism and their able peers were engaged in social interaction for a longer duration while in school [31].

This demonstrates that not only can learners with Autism benefit from social skills training but also the entire class can benefit as well, which will avoid any stigma placed on learners with Autism receiving intervention alone. The literature has given a good insight for understanding how peer interaction as a strategy helps to improve the education performance of learners with ASD. However, these studies have been conducted in different countries with different institutional set up. There is very limited evidence of such studies having been conducted in Kenya especially in Nyamache sub- county, Kisii County. Hence the need for this study to fill this gap.

B. Effects of Learners Self-Management on Educational Experience of Learners with Autism in Public Primary Schools

Many learners with Autism are known to have difficulty with self-management of their behavior. Self-management intervention teaches a child to a) discriminate between appropriate and inappropriate behaviors, b) evaluate their own behavior, c) monitor their mainstreamed and Autistic behavior over time, and d) reinforce their behavior when specific criteria are met [27]. If learners with Autism are taught self-management skills in the classroom, they can function more independently with minimal reliance on a teacher or educational assistant. feo & Gast (2000) that analyzed the influence of self-management intervention on learners with autistic behavior in an integrated preschool classroom, results showed a significant improvement in the learners' behavior and independent working skills, in which gains were maintained after intervention had stopped. This finding is very promising to achieve successful mainstreaming of learners with Autism in the classroom. An example of a self-management strategy is to have a learner with autistic disabilities keep track of the number of times they remembered to raise their hand prior to speaking and the number of times that they did not [8].

The learners can be taught to reinforce themselves for doing a favorite activity in their free time. Knowing how to implement self-management strategies is important for an educator to understand in order to teach a learner with Autism in how to function appropriately in the classroom [32]. In addition, self-management promotes independence in the classroom as it shifts

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responsibility for managing behavior from the teacher to the learner, which allows the teacher to focus on instructions. If learners gain this independence, it will give them a sense of belonging to the classroom community and provides them with the opportunity to engage in activities with their peers without the stigma of having a one-on-one aide. Self-management has also been utilized for improving social skills and reducing disruptive behavior [27]. It is important for teachers to help their learners gain confidence in their abilities which will ultimately keep them motivated and create a positive learning environment.

C. Effects of Antecedent Procedures on Educational Experience of Learners with Autism in Public Primary Schools.

Antecedent procedures are strategies that would be implemented before the learner with Autism participates in a required task. The strategies of priming, prompting, and the use of picture schedules are used to prevent the occurrence of challenging stereotypical behaviors and will also help learners cope with the task [27]. The term priming can be thought of as pre-practice, where learners preview information or activities that they are likely to have difficulty with before they engage in the main activity with the classmates [27]. For instance, if a learner has a difficult time during introductory text of any subject particularly basic concept, the teacher needs to do introduction of the subject to the class, the introduction can be done to the learner individually before the learner experiences the introduction concept with the class.

The priming strategy is important in facilitating the mainstreaming of learners with Autism since it links individualized instruction with classroom group activities [32]. This also provides learners with autistic behavior the opportunity to practice their social skills while interacting with their peers. Prompting strategies is a way of eliciting an appropriate response in a targeted educational or behavioral activity, as learners with Autism may not respond to the instructions delivered in a general education classroom. It is important for facilitating mainstreaming of learners with Autism, especially to encourage participation in group lessons. If there is an educational assistant in the classroom, they should be positioned behind the learner with Autism so that they do not distract other learners from focusing on the classroom teacher [31].

Hunt, Staub, Alwell, and Goetz (2004) noted that the educational assistant should use graduated guidance to deliver prompts and reinforce the learners for responding. As the learner with Autism begins to participate well, the prompting can gradually be faded out until the learner can respond independently. For example, educational assistants can prompt the learner to attend to the teacher by briefly clapping their hands on either side of the learners' face to direct the learner's gaze to the teacher, which the prompt can later be reduced by placing only one hand at the side of the learner's face and eventually the learner will attend independently. However, it is also important for the teacher to prompt and reinforce the learner with Autism as much as possible so that the learner learns to respond to the teacher as well [32].

Picture schedules are created to inform the learner with Autism about what to expect on mainstreamed school and the type of activities they will be doing. Since transitioning from one activity to another is difficult for some learners with Autism, picture schedules can provide them with a cue on what the next activity will be. It is an effective strategy to promote the independent engagement and performance of classroom activities and decreasing dependence on an educational assistant or teacher [33]. A study evaluated the effectiveness of a picture-activity schedule in teaching learners who are autistic on how to engage in on-task and on-schedule behaviors. The results revealed that a) learners with autism quickly learned the mechanics of the picture-activity schedule via graduated guidance which was faded, b) independently showed high levels of sustained on-task and on-schedule behaviors with the picture book alone; and c) their performance generalized to new activities [8]. Therefore, using a picture schedule can help in teaching learners with autistic conditions in mainstreamed classroom hence giving the learners confidence and the opportunity to interact with their peers. There is need to establish through research whether these procedures exist at Primary School in Kisii county specifically in Nyamache sub-county. This study therefore seeks to fill this gap.

D. 2.4 Effects of Peer-Mediated Interventions on Educational Experience of Learners with Autism in Public Primary Schools

Putnam (2003) noted that peer-mediated interventions have been advocated as potentially useful approaches for facilitating the participation of learners with Autism in general education classrooms. This is because of the fact that common deficiencies in the social relationships of learners with Autism result from poor intervention strategies for enhancing these relationships. Utilizing typical peers to support the educational experience of learners with Autism has the potential to reduce the need for continuous one-on-one adult attention, thus allowing learners with Autism to function with increased autonomy and in a manner that more closely matches that of their typical classmates [54].

Fuchs, Fuchs, Mathes, and Simmons (2007) peer tutoring consists of pairing two learners together to work on any instructional strategy, with one learner providing help, instruction, and feedback to the other. Peer tutoring strategies have been shown to be effective in producing increases in on-task behavior, educational experience, and social interactions for learners with disabilities in mainstreamed classrooms. In class wide peer tutoring (CWPT), all learners in the class are paired and work simultaneously. The purpose of CWPT is to increase the amount of instructional time that all learners engage in educational and to provide pacing, feedback, immediate error correction, high mastery levels, and content coverage [19].

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Kamps et al. (2014) examined the effect of CWPT in reading instruction among three learners with autistic disability participating in regular education classrooms, results of reading assessments revealed gains in reading fluency and correct responses to reading comprehension questions. Furthermore, in unstructured free-time activities, increases in the duration of social interactions between the learners with Autism and their non-disabled peers were observed after the implementation of CWPT. However, there is some evidence suggesting that increasing the rate of social interaction among learners with disabilities by implementing CWPT programs may be insufficient in producing enduring changes across non-programmed settings. This gives appropriate evidence of the effect of CWPT in enhancing educational experience of learners with ASD, however, there is need to establish whether this strategy exist among mainstreamed schools in Kisii county specifically in Nyamache sub-county, hence the need for this study to help fill this gap [37].

Odom and Strain (2013) sought to assess the effect of Utilizing peer supports in enhancing educational experience of learners in mainstreamed classroom. A number of researchers have focused on recruiting typically developing learners to serve as peer support for learners with Autism. The goal of this strategy is similar to that of peer tutoring but with the focus being on improving the social interaction skills of learners with autistic disabilities. They evaluated the effects of peer initiations on the social interactions of preschoolers with autistic-like symptoms. Teachers prompted and reinforced social initiations made by identified peer supports. Results showed increased frequencies of positive social interaction, and although these results maintained when the teachers faded their reinforcement of peer-initiated interactions, there were decreases in interactions when teacher prompts were withdrawn. Furthermore, the results were not observed to generalize to other mainstreamed classroom settings, which calls for further study to assess the implication of this strategy among mainstreamed schools not only in Kisii County but in Kenya as a whole [49].

In another study, it was found that when typical learners-initiated contact with their peers with Autism, social responses by the learners with Autism increased, and when teachers prompted the social interactions, both social responses and initiations increased [48]. These findings suggest the potential of multi component intervention strategies in producing improvements in a variety of behaviors among learners with Autism in mainstreamed classrooms. Similarly, Brady, Shores, McEvoy, Ellis, and Fox, (2007) established that by simply training non-disabled peers to interact with classmates with autistic behaviors gives very positive improvement together with social interactions among the peers. In addition, Goldstein, Kaczmarek, Pennington, and Shafer (2012) found that simply having peers attend to, comment on, and acknowledge the behavior of their classmates with Autism resulted in improved rates of social interaction [23].

It was established that the participation of non-disabled peers in the implementation of social skills interventions and the use of self-monitoring strategies to record the quantity and quality of interactions with classmates with disabilities, increased the frequency of interactions, number of opportunities for interactions, and overall appropriateness of the interactions with their peers with disabilities, hence this showed a very positive improvement in the education achievement of the learners with disability. However, the study findings might not be generalized to the current area of study as it has a different geographical setting hence the need to carry out this study in order to establish whether a similar situation exists in Kisii County.

Dugan et al. (2011) evaluated cooperative learning groups during fourth-grade social studies activities, where the group activities consisted of tutoring on key words and facts, a team activity, and a whole class wrap-up and review. It was demonstrated that teaching social and educational skills to learners with autistic disabilities and their non-disabled peers in cooperative groups in integrated settings resulted in increased frequency, duration, and quality of social interactions. Cooperative learning groups have been used in mainstreamed classroom settings as an instructional activity for increasing both educational success and social interaction. This has resulted in improved educational experience engagement, test scores and increased duration of learner interaction between learners with Autism and their non-disabled classmates. Evidence of such a study in Nyamache sub-county of Kisii county is not available from the literature hence the need for this study to fill this literature gap [11].

Goldstein and Cisar, (2012) used cooperative learning groups to support three fully included second-grade learners with multiple severe disabilities, including one with Autism and an intellectual disability. The results showed that with gradually fading assistance from the teacher, the non-disabled members of the learning groups provided cues, prompts, and consequences that assisted the learners with disabilities in demonstrating targeted basic skills in the original cooperative learning group as well as in a newly formed group. Furthermore, achievement tests indicated that the non-disabled learners who participated in cooperative groups performed as well as members of groups that did not include a learner with a disability [22].

Kamps, Leonard, Potucek, and Garrison-Harrell (2005) conducted two experiments related to cooperative learning groups and their educational effects on including learners with Autism in general education classrooms. In both, cooperative learning groups were implemented and consisted of activities that included comprehension questions, educational games, and peer tutoring on vocabulary words. Results of both experiments in this study revealed increased reading gains, educational engagement, and peer interaction among learners with autistic disability and their peers participating in general education classrooms [36].

Kamps et al. (2012) investigated the use of social skills groups to facilitate the increase of social interactions among three boys with autistic disabilities who were integrated into a general education first-grade classroom. It was noted that group members were

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taught social initiate, respond, and keep interactions going, taking turns and sharing tasks and asking for help and helping others in activities. Results demonstrated increases in the frequency of, time engaged in, and duration of social interactions, as well as in the responsiveness of learners and peers to each other. The study established that using group-oriented contingency helped to reinforce peers to share, provide help, and organize play exchanges with their preschool classmates with Autism. It was also noted that Peer-mediated interventions have not only been documented as effective in facilitating the educational mainstreaming of learners with Autism but have also been identified as having social validity [37]. Research on the peer-mediated interventions has documented positive ratings made by typical peers regarding their perceptions of peer-mediated interventions and positive educational outcomes for able learners who participated in peer-mediated interventions [10].

III. METHODOLOGY

A. Research Design and Approach

The study adopted a descriptive survey design. This design is adopted because it is useful in identifying the standards against which the existing conditions can be compared. The design was chosen because it involves gathering data from the respondents without manipulating them under their natural setting. Descriptive survey design assists in collecting both quantitative and qualitative data about a known phenomenon for the sake of analysis using and at times draw valid general conclusions from this factual information at hand. Surveys are not just used for fact finding but also may result in that formulation of important principles of knowledge and solutions of problems. Descriptive survey design was the only means by which views, opinions attitudes and suggestions meant to improve education practices.

B. Study Area and Target Population

The study was carried out among public primary schools in Nyamache sub-county Kisii County in Kenya. The sub-county has 102 public primary schools, 102 headteachers and a total of 1232 teachers with 65 SNE trained teachers. The study therefore targeted 11 mainstreamed schools, population of 11 head teachers and 36 SNE trained teachers in public primary schools in Nyamache Sub-county. The sub-county has the highest number of special units indicating that they have the highest number of learners who are challenged in their mainstreamed primary schools especially ASD learners, according to the Nyamache sub-county director of education 2021, Kisii County.

C. Sampling Technique and Sample Size

According to Kothari (2014) sampling was used to assist the researcher select a sample from the entire study population which is managed and suitable for providing the expected data for analysis [40]. The 11 mainstreamed schools were purposefully selected because they were being identified by EARCs and MoE officials having autistic learners in mainstreamed classrooms in addition in these schools there were a total of 11 headteachers and 36 SNE trained teachers all this were purposefully being sampled, depending on what one wants to know and what would be useful, have credibility and what was done with available time and resources. Scholars have suggested that a sample of between 10-30% of the population is appropriate for use in a study. Fraenkel and Wallen (2009) recommend a minimum sample size of 100 subjects in descriptive studies [17]. The 30% of the total, population of 102 primary schools in the sub-county is 30 schools whereby out of these schools, 11 schools are mainstreamed with ASD learners. The researcher therefore selected the 36 SNE trained teachers and 11 head teachers from the 11 mainstreamed schools with ASD learners. This gives a total of 47 respondents. For this study screening was not done to establish the actual cases of ASD, however the researcher relied on the information provided by the teachers and the head teachers on the cases that are in their respective schools. The distribution was as shown in table 1.

Table I. Sample Size Distribution

<i>Schools</i>	<i>Head teachers</i>	<i>SNE trained teachers</i>	<i>Total</i>
A	1	2	3
B	1	2	3
C	1	4	5
D	1	3	4
E	1	3	4
F	1	5	6
G	1	4	5
H	1	4	5
I	1	3	4
J	1	3	4
K	1	3	4
Total	11	36	47

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D. Data collection Instruments

The study used questionnaires and observation schedule as the main data collection instruments for the study.

E. Data Analysis

The study collected both quantitative and qualitative data in order to give a broader understanding of the research objectives. Qualitative data was derived from open-ended questions in the questionnaires of Section A of the headteachers and SNE trained teachers' questionnaire whereby the data was analyzed using responses from them. Questionnaire was coded in order from one to the last respondent according to the number that was returned from the filled questionnaires. Qualitative data was analyzed thematically according to the objectives of the study, this is because the responses were varied and wouldn't be tabulated. The analysis focused on all the individual's responses to each question across all respondents and their answers. In addition, qualitative data obtained from observation schedule was in form of text.

Quantitative data to be collected was derived from close-ended questions of Section B questionnaires for headteacher and SNE trained teacher. The quantitative data was analyzed and presented in form of figures and tables for ease of understanding. In order to address the research questions in the study, the Spearman correlation analysis (the non-parametric version of the Pearson) was used to determine the strength of the relationship between independent variables capturing level of peer interaction, learners' self-management, antecedent procedures and peer-mediated and dependent variable of learners' educational experience.

All the items(questions) were value based on numbers 1-5 which stand for strongly disagree to strongly agree. All the values numbers (1-5) for each question in a questionnaire were prepared and entered into SPSS software for statistical analysis. This software was useful in statistical analysis, data management and data documentation. From these findings, discussions and conclusions would arise in answering the research questions. The researcher consequently made recommendations.

IV. RESULTS AND DISCUSSIONS

A. Response Rate

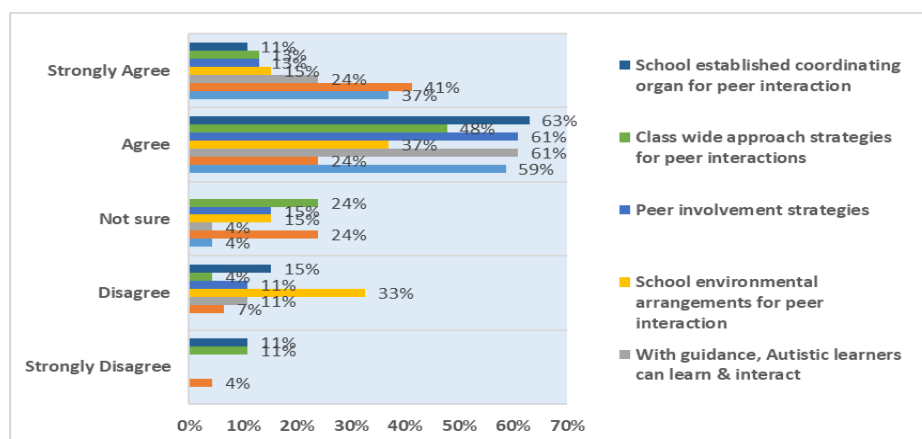
Out of the 47 questionnaires that were administered, the researcher collected back 46 (97.9%) of the questionnaires, of which all the 11 questionnaires from the head teachers and 35 from the teachers were collected back and used for the quantitative analysis. The high response rate is attributed to the school visit during the observation at the classroom. The researcher conducted all the observations that were to be conducted among the schools.

Table II. Response Rate

Category	Questionnaires Administered	Questionnaires Returned	Percentage
	Frequency	Frequency	
Head teachers	11	11	94.79%
Teachers	36	35	92.86%
Total	47	46	80%

B. Effects of Peer Interaction on Their Educational Experience of Learners with ASD.

The first objective sought to establish the effect of peer interaction on the educational experience of learners with ASD. The respondents were required to give their response by ticking the box which most presents their views of the provided statements in the table. On a scale of 1-5 (Where 1=Strongly, Disagree, 2=Disagree, 3=Not Sure, 4=Agree, 5=Strongly Agree). The best answer is one that honestly reflects your own views. The response was summarized as presented in the figure 6.



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1. Response on Effects of Peer Interaction

On whether effective peer interaction promote social rules such as self-control and turn taking in conversation to promote educational experience. The researcher established that 2(4.3%) were not sure 27(58.7%) agreed while 17(37.0%) strongly agreed with the statement this implies that effective peer interaction promote social rules. This supports the findings of in one such study, Harris, Handleman, Kristoff, Bass, and Gordon (2016) who conducted a study that sought to compare the language ability of learners with autism enrolled in a segregated preschool classroom the study established that learners who had been enrolled in an inclusive class room did not show any significant deference in language development [26].

When asked if there is a comprehensive monitoring and evaluation framework in place at the school to ensure effective and efficient implementation of peer interaction to promote educational experience of learners with autism, 2(4.3%) of the respondents strongly disagreed while 3(6.5%) disagreed. 11(23.9%) of the respondents were not sure. On the other hand, 11(23.9%) agreed with the statement as the majority, 19(41.3%) strongly agreed. This shows that there is a comprehensive monitoring and evaluation framework at place in the school to ensure effective and efficient implementation of peer interaction to promote educational experience of learners with autism. The results support the findings of Kalabula, (2010) and Mbwilo, Smide, and Aarts (2017) who also noted that most schools do not have appropriate monitoring systems to evaluate the learners with disability like autism and this affects their ability to mainstream them in the learning system [35, 44].

Regarding the statement that learners with autism are likely to learn and interact effectively with their able peers when guided, 5(10.9%) of the respondents disagreed with the statement. 2(4.3%) of the respondents were not sure. On the other hand, majority of the respondents, 28(60.9%), agreed with the statement while 11(23.9%) strongly agreed. This indicates that learners with autism are likely to learn and interact effectively with their able peers when guided. This agrees with the finding of (Harris et al., 2016) who established in his study on inclusion of learners with autism that when these learners interact with their peers it is much easier for them to learn things much faster and in due cause will be able to master the concepts effectively. The results are in line with the findings of Panteliadou, Filippatou and Xenaki, (2013) who indicated that mainstreaming plays a very critical role in enhancing the interaction of learners with conditions such as autism this assists the learners to effectively learn and interact with their peers and hence improves their development in life matters [32].

The respondents were asked if the school has environmental arrangements to promote peer interaction to improve educational experience and 15 (32.6%) of the respondents disagreed with the statement. 7(15.2%) were not sure. Then again, most of the respondents, 17 (37.0%) agreed with the statement as 7 (15.2%) strongly agreed. This implies that the school has environmental arrangements to promote peer interaction to improve educational experience. Previous studies such as

Dunlap & Bunton-Pierce, 1999; Koegel, Valdez-Menchaca, Koegel, & Harrower, 2001) have widely noted that autism is a highly heterogeneous disability with regard to level of functioning. hence the level and intensity of supports required for a given learner with autism will depend largely on the characteristics of the learner's functioning [12].

On whether peer involvement is a good strategy to teach autistic learner to behave in a manner that resembles their peers positively, 5(10.9%) of the respondents disagreed with the statement. 7 (15.2%) of the respondents were not sure. But then, majority of the respondents, 28 (60.9%) agreed with the statement as 6 (13.0%) strongly agreed. This shows that peer involvement is a good strategy to teach autistic learners to behave in a manner that resembles their peers positively. Previous studies such as Koegel, Valdez-Menchaca, Koegel, & Harrower, (2001) support this argument as they indicated that when the learners with disability interact with the others they are likely able to acquire various skills that they are unable to acquire on their own. This shows that there is an influence from peer support among the learners with autism [27].

The results from the study indicate that 5(10.9%) of the respondents strongly disagreed with the statement that the school uses class wide approach as a strategy for peer interaction where the entire class is taught how to initiate interaction while 2 (4.3%) disagreed. 11 (23.9%) were not sure. On the other hand, most of the respondents, 22(47.8%), agreed with the statement as 6(13.0%) strongly agreed. This implies that the school uses class wide approach as a strategy for peer interaction where the entire class is taught how to initiate interaction which shows a remarkable improvement in the interaction of the peers in class. In this case the study by Mbwilo, et al (2017) and Panteliadou, et al (2013) both support the assertion that is held by the respondents on the use of class wide approach to assist the learners with autism to interact and learn from others [44, 52]. This indicates that as much as the strategy might be appropriate from effective learning but it is not used effectively in most of the schools.

When asked if the school has established a coordinating organ whose responsibility is to ensure proper peer interaction coordination and effective integration of learners with autism, 5(10.9%) of the respondents disagreed with the statement, 7(15.2%) were not sure, while 29(63.0%) being the most respondent agreed with the statement and 5(10.9 %) strongly agreed. This implies that the school has established a coordinating organ whose responsibility is to ensure proper peer interaction coordination and effective integration of learners with autism. This supports the work of Fein & Dunn (2007) who noted that when peers interact effectively with other challenged learners it makes them much at ease to learn just like the other learners in the class room and with time they are able to start doing things on their own. This shows that the school with mainstreaming plays a very vital role in helping the learners interact effectively with others and hence learning takes place [16].

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The respondents were also asked to indicate whether the attitude of the learners was positive or negative, the respondents indicated that the attitude of the learners was not positive because non-disabled learners lack appropriate knowledge, skills and attitude on how to handle autistic learners while in classroom. The results are in line with the findings of Avramidis & Norwich, (2012) and who indicated that the learner's attitudes towards learners with ASD in general education settings were generally positive [2]. This is consistent with previous studies such as Mesibov & Shea, (2016) who indicated that teacher attitudes indicating that teachers are typically supportive of the general concept of mainstreaming [46]. However, in the current study, participants suggested that full mainstreamed is not appropriate for all learners with ASD. Further, participants indicated a variety of factors which would promote the successful mainstreaming of a learner with ASD, including the attitude of the staff, severity of disability, and help of an auxiliary teaching professional.

From the open ended questions it was noted that for these strategies of mainstreaming to work effectively there is need for the teachers and other people involved in the education sector to identify the learners with autism are to be identified in time in order to receive appropriate and quality educational experiences and support while at mainstreamed schools if the EARCs was to be the starting point also creating awareness among other learners about their nature by involving them in social interaction and guidance and counselling for acceptance.

The implication of this study is supported by the findings of Odom, Hoyson, Jamieson, and Strain (2015) who evaluated the effects of peer initiations on the social interactions of preschoolers with autistic-like symptoms. In the study the teachers were in the forefront to prompt and reinforce social initiations made by identified peer supports. The results showed increased frequencies of positive social interaction. The results were maintained when the teachers faded their reinforcement of peer-initiated interactions. This shows that peer interaction had an effect on the interaction of the learners with ASD and hence it further influenced their educational achievement [48].

Further analysis was done using research question; is there significance association between Peer Interaction and Education Experience of learners with autism. Chi square test of association was used to test the relationship between Peer Interaction and educational experience of learners with autism. The hypothesis; *Ho: there was no association between the peer interaction and the educational experience of the learners with ASD in mainstream classes*, was tested and the results were presented in table 4.

Table III. Chi square test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	182.248 ^a	46	.000
Likelihood Ratio	116.073	46	.000
Linear-by-Linear Association	4.133	1	.042
N of Valid Cases	46		

The results show that there is a very significant association between peer interaction and the educational experience of learners with ASD. The results show that there is a very significant association between the variable which implies that the educational experience of learners with ASD is influenced by peer interaction. When the ASD learners in a mainstream school interact well with their peers they are in a better position to learn and develop new habits that are good for their development. This is revealed by the high chi square value of 182.248 which is very significant at p- value of 0.000. This is confirmed by the spear-man's correlation coefficient which is presented in table 5.

Table IV. Spearman's correlation analysis

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Ordinal by Ordinal Spearman Correlation	.577	.121	4.686	.000 ^c
N of Valid Cases	46			

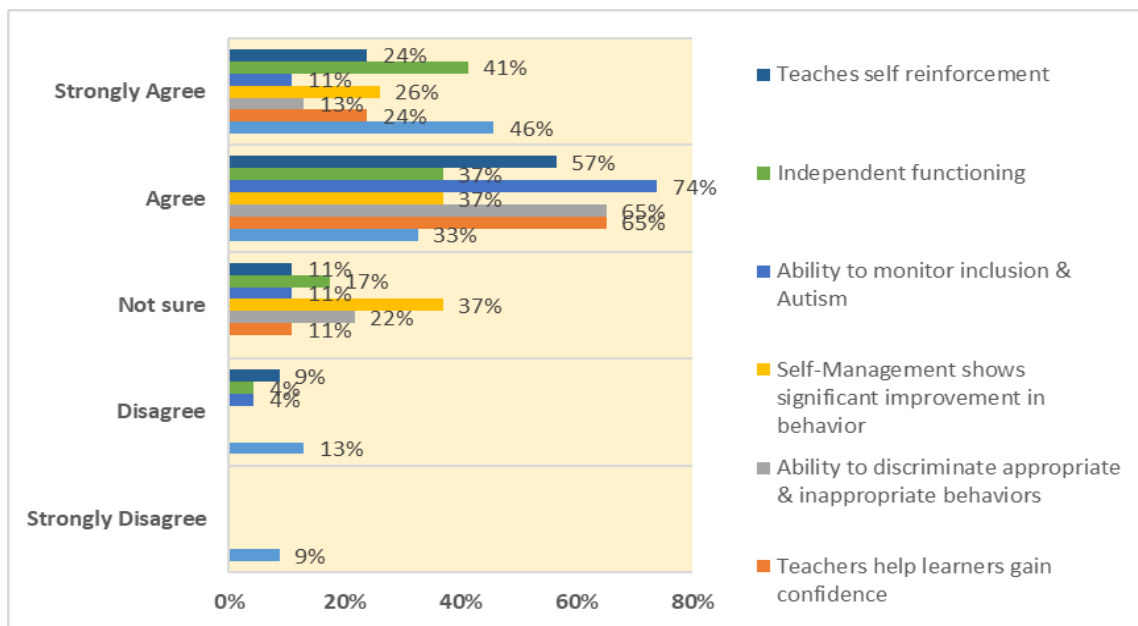
The results in the table show that there is a moderate association between peer interaction and educational experience of learners with ASD ($r = 0.577$; P value < 0.05). This shows a very significant association. The t statistic shows that the association is not just by chance but it is statistical since the p - value was less than 0.05. These supports the findings of Simpson (2015) who also established that among the many factors affecting the education attainment of the learners with ASD in mainstream schools, the study established that peers support had a very strong association with the education experience of the learners with ASD[9].

C. Learners Self-Management on their Educational Experience of Learners with ASD.

The second objective sought to establish the effect of learners Self-Management on the educational experience of learners with ASD. The respondents were required to give their response by ticking the box which most presents their views of the provided

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statements in the table. On a scale of 1-5 (Where 1=Strongly, Disagree, 2=Disagree, 3=Not Sure, 4=Agree, 5=Strongly Agree). The best answer is one that honestly reflects your views. The response was summarized and presented in the figure 7.



2. Learners Self-Management on Educational Experience of the Learners with Autism

On whether learners with autism have difficulty with self-management with their behavior, 4(8.7%) of the respondents strongly disagreed with the statement while 6(13.0) disagreed. 15(32.6%) of the respondents agreed with the statement as the majority, 21(45.7%) strongly agreed. This implies that learners with autism have difficulty with self-management with their behavior this was well expressed because teachers spend more time with these learners. A study by Harrower & Dunlap, (2001) supports this as they also established that the learners with autism struggle to cope and manage themselves as they try to learn to do what their peers are doing however, they also noted that to some of the learners the challenge is a good avenue for them to learn [27].

The study also sought to establish whether teachers in the school help their learners gain confidence in their abilities which will ultimately keep them motivated and create a positive learning environment, 5(10.9%) of the respondents were not sure. Majority of the respondents, 30(65.2%) agreed with the statement as 11(23.9%) strongly agreed. This indicates that teachers in the school help their learners gain confidence in their abilities which will ultimately keep them motivated and create a positive learning environment and this might be a contribution factor to their educational achievement. This supports the findings of Sainato et al. (2013) who evaluated the effects of a self-management intervention on the independent work skills of children with autism participating in an integrated preschool classroom. Results showed immediate and substantial improvements in the learners' behavior and also showed that these gains were maintained after each intervention component was systematically withdrawn. This implies that the learner who had gained self-management skills were motivated and become more confident in their abilities hence improved educational achievement [55].

When asked if self-management intervention teaches a child to discriminate between appropriate and inappropriate behaviors, 10(21.7%) of the respondents were not sure. Majority of the respondents, 30(65.2%) agreed with the statement while 6(13.0%) strongly agreed. This signifies that through the effort of the teachers setting individualized goals and rewarding socially acceptable behaviors which was highlighted as a mechanism of mainstreaming all learners including autistic learners which made them focused and prevented behavior outburst. The results agree with the findings of Frea and Hughes (2017) who established that the combination of self-management strategies with functional assessment in supporting learners with autism in a learning environment presents a potential for conducted functional analyses to determine the function of the learners' problem behaviors. According to the findings a learner was in a position to discriminate between different behaviors once the function was determined, a response that was functionally equivalent to the problem behavior was initiated approximately by the learners. This implies that learners with ASD who had learner's self-management skills were in a better position to improve in the use of the alternative behaviors with considerable decreases in problem behavior [18].

The respondents were asked if self-management shows a significant improvement in the learners' behavior and independent working skills in school environment for educational experiences and 17(37.0%) of the respondents were not sure. But then, 17(37.0%) of the respondents agreed with the statement while 12(26.1%) strongly agreed. This shows that self-management intervention on learners with autism in mainstreamed classroom shows a significance improvement in the learner

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managing behavior and independent working skills, which gives them a sense of belonging to the classroom environment and provides them with opportunity to engage in activities with their peers without stigmatization of one-on-one aide. The results are in line with the findings of Hunt, et al (2004) who also noted that though learners with autism struggle to cope in the new environment and learn how to manage themselves and gain that self-control, but it takes them longer and this requires a lot of patience from the teachers and other supportive learners. The results indicated a strong association between the self-management strategies taught to the learner with ASD and their educational attainment [33].

Results from the study indicate that majority of the respondents, 34(73.9%), agreed with the statement as 5(10.9%) strongly agreed. Only 2(4.3%) of the respondents disagreed with the statement that self-management intervention teaches a child to monitor their inclusion and autism behaviors over time. 5(10.9%) of the respondents were not sure. This implies that self-management intervention was an effective strategy in teaching children to monitor their autistic behaviors over time and hence be able to manage them effectively. The teachers play a very significant role in enhancing the process of learner's self- management, without the teachers support it is difficult for these learners to gain any meaningful progress in self- management. The results support the findings of Koegel et al. (2012) who used self-management to improve the responsiveness of four children with autism to verbal initiations from others in community, home, and school settings without the presence of a treatment provider. The learner's behavior was monitored using a wrist counter which was used to record their correct responses to specific questions which were then rewarded. The results demonstrated improvements in the learners' independent responsiveness to others [38].

From the study, 2(4.3%) of the respondents disagreed with the statement that if learners with autism are taught self-management skills in the classroom, they can function more independently with minimal reliance on a teacher or educational assistant. 8(17.4%) of the respondents were not sure. But then, 17(37.0%) of the respondents agreed with the statement while the majority, 19(41.3%), strongly agreed. This signifies that if learners with autism are taught self-management skills in the classroom, they can function more independently with minimal reliance on a teacher or educational assistant. The results are in line with the findings of Sainato et al. (2015) who evaluated the effects of a self-management intervention package on the independent work skills of children with autism participating in an integrated preschool classroom. The results showed a substantial improvement in the learner's behavior and a lot of gains were maintained after each intervention component was systematically withdrawn. The implication of this is that after the learners with ASD are assisted to master the art of self-management skills they are able to independently function on their own with minimal support from the teachers [56].

On whether self-management intervention teaches a child to reinforce their behavior when specific criteria are met, 4(8.7%) of the respondents disagreed with the statement. 5(10.9%) were not sure. On the other hand, majority of the respondents, 26(56.5%), agreed with the statement as 11(23.9%) strongly agreed. This indicates that self-management intervention teaches a child to reinforce their behavior when specific criteria are met. When the respondents were asked to indicate when they felt that the autistic learners have acquired appropriate self- management skills, majority of them indicated that this is when they have learnt to independently regulate his or her own behavior and act appropriately at school and at home. It was however noted that this is a long process that requires both the commitment of the teachers, the parents and the peers. These findings support the findings of Sansosti and Sansosti (2012) and Elsabbagh et al. (2012) in the two studies it was noted that an effective mainstreaming strategy should with time influence the ability of the learners with autism to improve on how they carry themselves and develop appropriate behavior [58, 15].

Regarding the challenges that are likely to exist and have an effect on the autistic learner's acquisition of self-management skills are; effective coordination of their various body parts, forgetfulness and short concentration spans, mood swings which happen to have an effect on their routine practices. These challenges are more of personally as they affect an individual person. On the other hand, the respondents also identified other challenges that included environmental issues and inadequate trained personnel.

Using research question, which states that is there statistical significance association between learner's self-management and educational experience. Whereby further analysis sought to establish whether there was an association between the learner's self-management and educational experience. This was done by testing the null hypothesis that; *Ho: there was no association between the learner's self-management and the educational experience of the learners with ASD in mainstream classes* was tested the results were presented in table 6.

Table V. Chi Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	133.966 ^a	36	.000
Likelihood Ratio	100.913	36	.000
Linear-by-Linear Association	12.502	1	.000
N of Valid Cases	46		

a. 49 cells (100.0%) have expected count less than 5. The minimum expected count is .09.

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The results show that there is a strong and significant association between teaching self-management to the learners with ASD and educational achievement among these learners (chi square = 133.966; p value =0.000). This is in line with Sainato et al. (2015) who also establish that there was a strong association between self-management intervention package and the independent work skills of the learners with autism participating in an integrated preschool classroom.

Further analysis sought to find out whether there was a significance association between learner’s self-management and educational experience. This was done and presented in table 7.

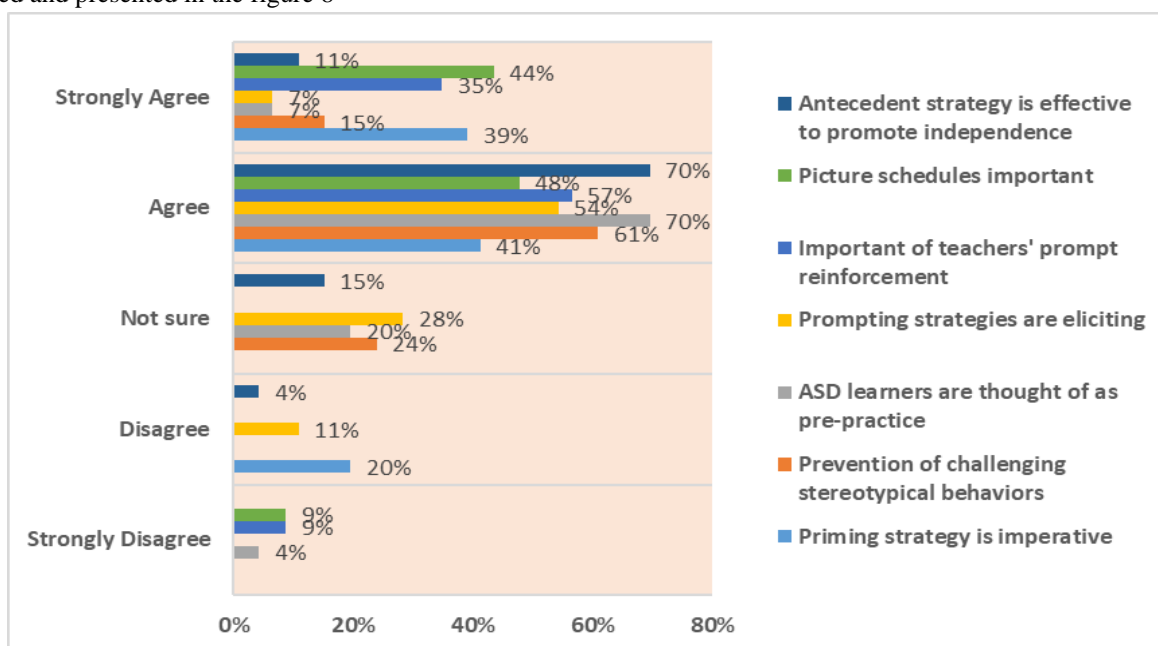
Table VI. Association between teaching learners with ASD self-management skills and education experience

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Ordinal by Ordinal Spearman Correlation	.631	.089	5.393	.000 ^c
N of Valid Cases	46			

The results show that there is a significant association between the variables as shown from the table (chi square = 0.631; p < 0.05). The *t* statistic was 5.393 which shows that there is an association between the variables meaning that teaching the learners with ASD has a strong association with teaching them self-management. This supports the findings by Elsabbagh et al., (2012) who also noted that there was a strong association between teaching learner’s self-management skills and their education achievement. The implication of this is that learners with ASD have the capability to learn and acquire self-management skills that are very important in enhancing their relationship with others and hence improving their educational experience [15].

D. Antecedent Procedures (Priming, Prompt Delivery and Picture Schedules) on their Educational Experience of Learners with Autism.

The third objective sought to establish the effect of Antecedent procedures (priming, prompt delivery and picture schedules) on their educational experience of learners with autism. The respondents were required to give their response by ticking the box which most presents their views of the provided statements in the table. On a scale of 1-5 (Where 1=Strongly, Disagree, 2=Disagree, 3=Not Sure, 4=Agree, 5=Strongly Agree). The best answer is one that honestly reflects your views. The response was summarized and presented in the figure 8



3. Response on the Antecedents’ Procedures and Educational Experiences

Regarding the statement that the priming strategy is imperative in facilitating mainstreaming of learners with autism, 9(19.6%) of the respondents disagreed. Most of the respondents, 19(41.3%), agreed with the statement while 18(39.1%) strongly agreed. This implies that the priming strategy is imperative in facilitating mainstreaming of learners with autism. On whether antecedent procedure was used to prevent the occurrence of challenging stereotypical behaviors and also helps learners cope with the task, 11(23.9%) of the respondents were not sure. On the other hand, majority of the respondents, 28(60.9%), agreed with the statement while 7(15.2%) strongly agreed. This shows that antecedent procedure is used to prevent the occurrence of challenging stereotypical behaviors and also helps learners cope with the task. A similar view was held by Elsabbagh et al., (2012) who in

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their study established that autistic learners have a low self-esteem but when they are included among other learners this condition always seems to reduce and they start acting in an almost normal way with effective support from the other learners and the teachers these learners are able to effectively cope and develop new skills [15].

When asked if ASD learners can be thought of as pre-practice, where learners preview information or activities that they are likely to have difficulty with before they engage in the activity with the class, 2(4.3%) of the respondents strongly disagreed with the statement. 9(19.6%) were not sure. But then, majority of the respondents, 32(69.6%), agreed with the statement as 3(6.5%) strongly agreed. This shows that ASD learners can be thought of as pre-practice, where learners preview information or activities that they are likely to have difficulty with before they engage in the activity with the class. The results agree with the findings of Zanolli, Daggett, & Adams, (2016) who noted that Pre-practice is important in facilitating the mainstreaming of learners with autism in that it links individual instruction to larger classroom group activities, a common feature of general education classrooms. Other studies have established that pre-practice is important in improving social interactions between children with autism in regular education classrooms, and the strategy has been shown to be very effective in increasing the initiations of social interaction with typical peers and improving academic achievement of these learners [64].

The respondents were asked if prompting strategies are ways of eliciting an appropriate response in a targeted educational experience or behavioral activity and 5(10.9%) disagreed with the statement. 13(28.3%) of the respondents were not sure. On the other hand, most of the respondents, 25(54.3%), agreed with the statement while 3(6.5%) strongly agreed. This implies that prompting strategies are ways of eliciting an appropriate response in a targeted educational experience or behavioral activity. The results are in line with the findings of the Sainato, Strain, Lefebvre, and Rapp (2017) who indicated that prompting strategies have been successful in facilitating the mainstreaming of learners with autism. Prompts were noted to have a very important influence in teaching learners with autism, in order to elicit an appropriate response in a targeted academic or behavioral activity, to supplement the general instructional routine. Using various prompting strategies is important in facilitating the mainstreaming of learner with autism, as these learners may not respond to traditional instructions delivered in general education classrooms [57].

Results from the study indicate that 26(56.5%), agreed with the statement whereas 16(34.8%) strongly agreed with the statement that it's important for the teacher to prompt and reinforce the learner with autism so that the learner learns to respond to the teacher as well. On the other hand, 4(8.7%) of the respondents strongly disagreed. This shows that it's important for the teacher to prompt and reinforce the learner with autism so that the learner learns to respond to the teacher as well.

When asked if picture schedules are created to inform the learner with autism about what to expect on a regular school day and the type of activities they will be doing, 22(47.8%) of the respondents agreed as 20(43.5%) strongly agreed, while 4(8.7%) of the respondents strongly disagreed. This indicates that picture schedules are created to inform the learner with autism about what to expect on a regular school day and the type of activities they will be doing. A study by Hall, McClannahan, and Krantz (2015) established that picture schedules were often used as a strategy for increasing predictability and as an alternative to verbal and written instruction among the learners with ASD. The study established that learners with ASD have challenges transitioning from one activity to another. The study noted that Picture schedules can serve as effective cues alerting learners with autism to upcoming changes in activities. Results demonstrated that, along with reductions in prompt use by classroom aides, the learners with ASD were found to have almost between 90% to 100% attention in following with different events of the time [24].

On whether antecedent strategy is effective strategy to promote the independent engagement and performance of classroom activities and decreasing dependence on a teacher, 2(4.3%) disagreed with the statement. 7(15.2%) were not sure. On the other hand, majority of the respondents, 32(69.6%), agreed with the statement while 5(10.9%) strongly agreed. This implies that antecedent strategy is effective strategy to promote the independent engagement and performance of classroom activities and decreasing dependence on a teacher. The results are supported by the findings of Sansosti and Sansosti (2012) who also indicated that learners with autism might perform better and learn new skills though effective interaction with others through various activities such as sports [58].

The response from the open- ended questions were analyzed and it was noticed that most teachers believed that when the learners with autistic conditions are involved actively in other activities such as sports, they become more active and hence are able to learn and develop more signs of change. The respondents also noted that if the people involved with these learners are effectively trained they will be in better position to help these learners master new skill before introducing another one. The Implication of the study is that the use of antecedent procedures offers an effective platform for the learners with ASD to be able to learn and understand changes that are occurring in their daily lives by being exposed to different cues such as seen in pictures.

Research question was used to determine if there was significance association between Antecedent procedures and educational experience. Further analysis sought to assess the association between the Antecedent procedures and educational experience using the chi square test of association the null hypothesis of the study stated that; *Ho: there was no association between the antecedent procedures and the educational experience of the learners with ASD in mainstream classes* was tested where the results were presented in table 8.

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Table VII. Chi square Association between Antecedent procedures and education of learners with ASD.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	128.783 ^a	30	.000
Likelihood Ratio	86.238	30	.000
Linear-by-Linear Association	3.554	1	.059
N of Valid Cases	46		

a. 41 cells (97.6%) have expected count less than 5. The minimum expected count is .09.

The results in the table show that there is a strong association between the variable (chi square = 128.783; p value < 0.05). This indicates that the application of the different antecedents in the teaching of the learners who have ASD. Further the researcher sought to assess the strength of the association using the Spearman correlation. The results were presented in table 9.

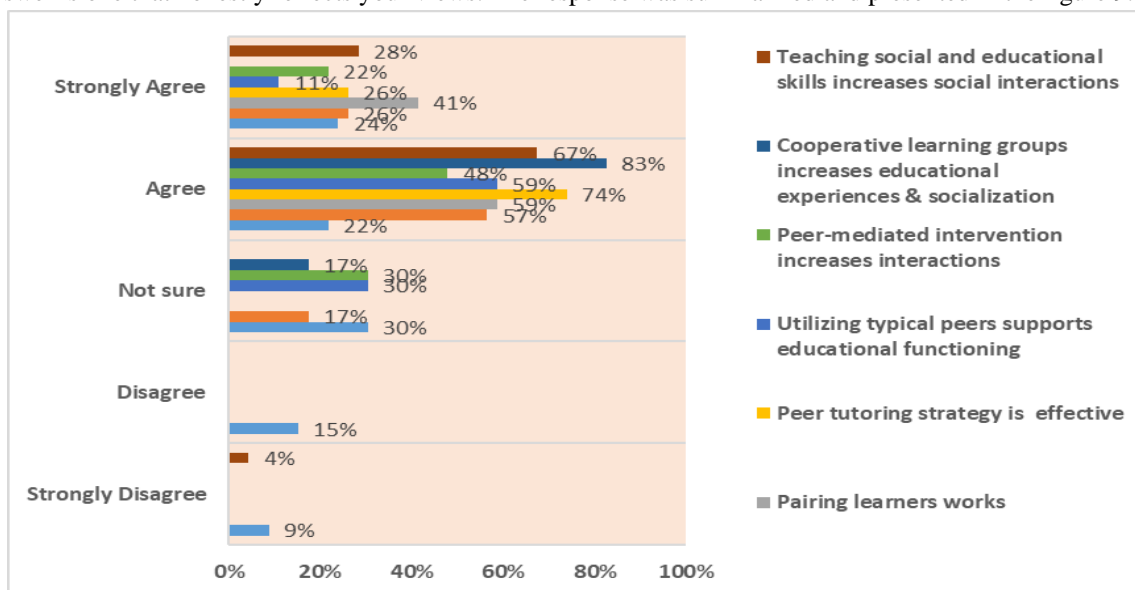
Table VIII. Association between the Antecedent procedures and education of learners with ASD.

	Value	Asymp.	Std. Error ^a	Approx. T ^b	Approx. Sig.
Ordinal by Ordinal Spearman Correlation	.567	.113		4.566	.000 ^c
N of Valid Cases	46				

The results show a moderate but significant association between the antecedence of teaching the learners with ASD and their educational experience. This is also confirmed by the t statistics that is 4.566 which implies that the association is very significant and has not occurred just by chance. A study by Koegel, & Koegel, (2012) and Taylor and Levin (2018) also established a strong positive association between Antecedent procedures and education of learners with ASD. According to their findings, Antecedent procedures that have been used specifically in addressing the educational challenges faced by learners with autism in general education classrooms include priming, prompt delivery, and picture scheduling. According the study these strategies were just among the few that assisted [38, 62]. The implication from this study is that educators demonstrate need to effectively understand the various antecedent strategies effective with respect to ASD; therefore, the findings should therefore be incorporated into training curricula and in-service presentations for teachers who are currently handling the ASD learners in mainstream schools.

F. Peer-Mediated Intervention on their Educational Experience of Learners with Autism.

The fourth objective sought to establish the effect of Peer-mediated intervention on the educational experience of learners with Autism. The respondents were required to give their response by ticking the box which most presents their views of the provided statements in the table. On a scale of 1-5 (Where 1=Strongly Disagree, 2=Disagree, 3=Not Sure, 4=Agree, 5=Strongly Agree). The best answer is one that honestly reflects your views. The response was summarized and presented in the figure 9.



4. Peer Mediated Intervention

On whether the school has advocated peer-mediated intervention for facilitating the participation of learners with Autism in general education classroom, 4(8.7%) of the respondents strongly disagreed with the statement while 7(15.2%) disagreed. 14(30.4%) were not sure. On the other hand, 10(21.7%) of the respondents agreed with the statement as 11(23.9%) strongly

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agreed. This shows that the school has advocated peer-mediated intervention for facilitating the participation of learners with Autism in general education classroom. This supports the findings of (Putnam, 2013) who established that due to common deficiencies in the social relationships of children with autism, peer-mediated interventions have been advocated as potentially useful approaches for facilitating the participation of children with autism in general education classrooms. According to the study learners with ASD learn effectively from their peers through effective mediated strategies [54].

The respondents were asked if peer-mediated interventions minimize exclusion differences among learners who need special education and from the results, 8(17.4%) of the respondents were not sure. But then, most of the respondents, 26(56.5%), agreed with the statement while 12(26.1%) strongly agreed. This indicates that peer-mediated interventions minimize exclusion differences among learners who need special education. This is in line with the findings of DuPaul & Eckert, (2018) who in his study noted that strategies such as Peer tutoring which consists of pairing two learners together to work on any instructional strategy, with one learner aiding, instruction, and feedback to the other has had fruitful effect in producing improvement on-task behavior such as math performance, and social interactions for children with ASD in mainstreamed classrooms [13].

The results have also noted that, majority of the respondents, 27(58.7%), agreed with the statement that they have found pairing learners works in their school because it helps the non-disabled to see disabled learner just like them and it has a lot of educational experience success in it whereas 19(41.3%) of the respondents strongly agreed. This implies that pairing learners works in the school because it helps the nondisabled to see disabled learner just like them and it has a lot of educational experience success in it. This agrees with the findings of Locke & Fuchs, (2015) who also noted that pairing learners with ASD with those who have no condition assists them to actively take part in the activities and this assists them to effectively learn [41].

When asked if peer tutoring strategy is effective in enhancing on-task behavior and social interaction for learners with Autism in mainstreamed classroom, majority of the respondents, 34(73.9%), agreed with the statement while 12(26.1%) strongly agreed. This shows that peer tutoring strategy is effective in enhancing on-task behavior and social interaction for learners with Autism in mainstreamed classroom. This agrees with the findings by Avramidis, Bayliss, & Burden, (2000) who note that peer tutoring has been used effectively in mainstream and inclusion classes to enhance the behavior of the learners especially in the education experience [3].

Regarding the statement that utilizing typical peers to support the educational functioning of learners with Autism has the potential to reduce the need for continuous one-on-one adult attention, 14(30.4%) of the respondents were not sure. But then, most of the respondents, 27(58.7%), agreed with the statement as 5(10.9%) strongly agreed. This implies that utilizing typical peers to support the educational functioning of learners with Autism has the potential to reduce the need for continuous one-on-one adult attention. This agrees with the findings of Hastings & Oakford, (2013) who supported the idea of using peer support to enhance the learning of ASD peers [28].

Results from the study indicate that 14(30.4%) of the respondents were not sure about the statement that peer-mediated intervention reveals that there is increase in frequency of interactions which offers more learning opportunities. On the other hand, most of the respondents, 22(47.8%), agreed with the statement as 10(21.7%) strongly agreed. This implies that peer-mediated intervention reveals that there is increase in frequency of interactions which offers more learning opportunities. This supports the findings by Avramidis, Bayliss, & Burden, (2000) who also established that peer mediated intervention was important in enhancing the learning process of the learners with ASD. This makes it possible to have the learners acquire skills much faster as they gain more confidence while with their peers. [3]

On whether cooperative learning groups is being used in mainstreamed classroom setting for increasing both educational experiences success and social interaction, 8(17.4%) of the respondents were not sure. On the other hand, majority of the respondents, 38(82.6%), agreed with the statement. This indicates that cooperative learning groups is being used in mainstreamed classroom setting for increasing both educational experiences success and social interaction. A similar view was held by Locke & Fuchs, (2015). The results further indicate that 2(4.3%) of the respondents strongly disagreed with the statement that teaching social and educational skills to learners with autism and their non-disabled peers in cooperative groups in integrated settings results in increased frequency, duration, and quality of social interactions. Majority of the respondents, 31(67.4%), agreed with the statement whereas 13(28.3%) strongly agreed. This shows that teaching social and educational skills to learners with autism and their non-disabled peers in cooperative groups in integrated settings results in increased frequency, duration, and quality of social interactions [41]. The findings agree with the work done by Brady, Shores, McEvoy, Ellis, & Fox, (2017) and Goldstein, Kaczmarek, Pennington, and Shafer (2012) who both agreed that in some circumstances, simply training nondisabled peers to interact with classmates with autism has been shown to improve spontaneous social interactions between learners with autism and their trained and untrained peers [6, 22]. Additionally, they established that simply having peers attend to, comment on, and acknowledge the behavior of their classmates with autism resulted in improved rates of social interaction [6].

The respondents were asked to narrate how they are able to create programs which involve all learner's participation as this will make other learners value every individual differently such as co-curriculum activities. And they indicated that they ensure they show the other learners that these learners are just challenged but they can do just as them if given support. Sometimes the school

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invites EARCs, specialist, parent, prominent personnel such politicians or alumnus with disabilities to help in creating awareness by guiding and counselling other parents and learners during educational day. This helps to ensure that the learners feel part of the society and see themselves as just being normal given a chance.

To a certain the relationship, research question was set, if there was significant association between peer mediated interventions and educational experiences. The results further sought to assess the nature of association between the peer mediated learning and the educational experience of the learners with ASD. In order to ascertain this the research hypothesis that; *Ho: there was no association between the peer mediated learning and the educational experience of the learners with ASD in mainstream classes* was tested using the chi square test and the spear man correlation. The results were presented in table 10.

Table IX. Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	147.583 ^a	36	.000
Likelihood Ratio	109.991	36	.000
Linear-by-Linear Association	9.590	1	.002
N of Valid Cases	46		

The results show that there was a significant and strong association between the peer mediated learning for the ASD learners and their educational experiences; (chi square = 147.583; P value < 0.05). This is further confirmed by the strong spear man's correlation coefficient and the t value. as presented in table 4.11.

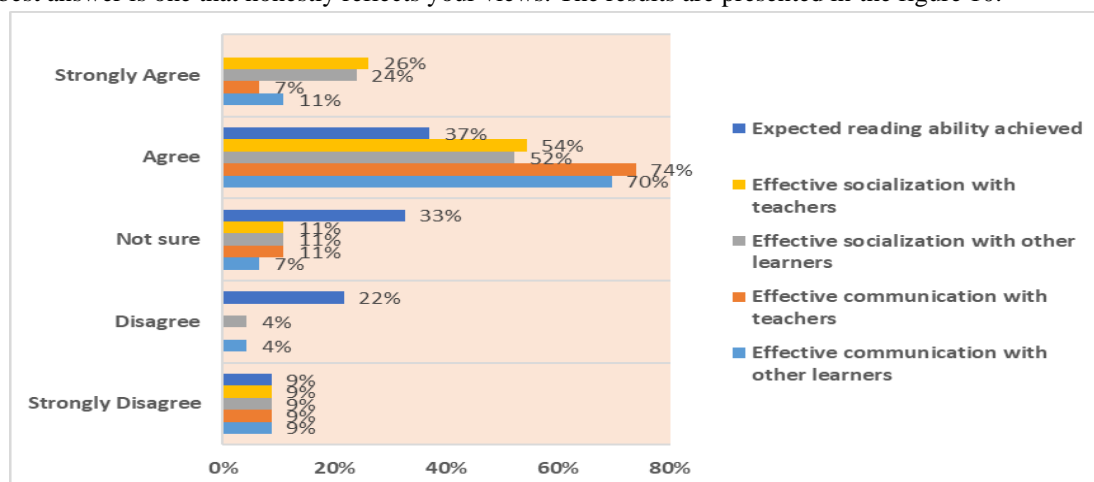
Table X. Spearman's correlation

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Ordinal by Ordinal Spearman Correlation	.608	.091	5.084	.000 ^c
N of Valid Cases	46			

The results show that there is a strong association between peer mediated learning and the experiences of the ASD learners. This is further confirmed by the statistic value of 5.084 which implies that the association between the variables is not just by chance. This implies that peer mediated learning has a significant effect on the education experiences of learners with ASD. This agrees with the findings of Kamps et al. (2012) who also demonstrated that there was an increase in the frequency of, time engaged in, and duration of social interactions, as well as in the responsiveness of learners and peers to each other [37]. Similarly, Kohler et al. (2015) who used a group-oriented contingency to reinforce peers to share, aid, and organize play exchanges with their preschool classmates with autism. Established that there was an increase in these social and supportive interactions. The overall findings show that Peer-mediated interventions not only have been documented as effective in facilitating the educational experiences of learners with autism but have also been identified as having a significant association with education experiences with the learners with ASD [39].

G. 4.3.5 Teachers' Perception on the Educational Experience of Learners with Autism.

Using the guide to response given below, please tick the box which most presents your views of the following statements in the table on the statements given. On a scale of 1-5 (Where 1=Strongly Disagree, 2=Disagree, 3=Not Sure, 4=Agree, 5=Strongly Agree). The best answer is one that honestly reflects your views. The results are presented in the figure 10.



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5. Response on the Teachers' Perception on the Educational Outcome of Learners with Autism.

On whether there is effective communication among autistic learners and other learners for educational experience in the school, 4(8.7%) of the respondents strongly disagreed with the statement while 2(4.3%) disagreed. 3(6.5%) were not sure. On the other hand, majority of the respondents, 32(69.6%), agreed with the statement whereas 5(10.9%) strongly agreed. This shows that there is effective communication among autistic learners and other learners for educational experience in the school. The results support the findings of Stone & Rosenbaum, (2018) who also noted that teacher's perception had an influence on the educational outcome of the learners with ASD [99].

When asked if there's effective communication among autistic learners and teachers for educational experience in the school, 4(8.7%) strongly disagreed with the statement. 5(10.9%) were not sure. But then, majority of the respondents, 34(73.9%), agreed with the statement as 3(6.5%) strongly agreed with the statement. This indicates that there's effective communication among autistic learners and teachers for educational experience in the school. These findings are in line with the work by Stone & Rosenbaum, (2018) who linked teachers experience and knowledge to effective communication with the ASD learners for effective learning process [99].

Regarding the statement that there's effective socialization among autistic learners and other learners for educational experience in the school, 4(8.7%) of the respondents strongly disagreed with the statement while 2(4.3%) disagreed. 5(10.9%) were not sure. On the other hand, most of the respondents, 24(52.2%), agreed with the statement while 11(23.9%) strongly agreed. This indicates there's effective socialization among autistic learners and other learners for educational experience in the school. The results support the findings by Simpson (2005) who established that experience with ASD, rather than knowledge or attitudes, was most predictive of the number of mainstreamed practices of which educators were aware and their reported use of treatments. The results further noted that because of teacher's knowledge and experience the level of socialization between the teachers and the learners improved and this led to improved educational experience among the learners [98].

Results from the study indicate that 25(54.3%), agreed with the statement while 12(26.1%) strongly agreed. 4(8.7%) of the respondents strongly disagreed with the statement that there's effective socialization among autistic learners and teachers for educational experience in the school. 5(10.9%) of the respondents were not sure. But then, most of the respondents. This implies that there's effective socialization among autistic learners and teachers for educational experience in the school. Hannah & Pilner, (2013) also noted similar results in their study that established that socialization between the teachers and the learners with ASD helps to improve the education achievement of the learners [41].

The respondents were asked if the reading ability of autistic learners in the school is at expected level and 4(8.7%) of the respondents strongly disagreed with the statement while 10(21.7%) of the respondents disagreed. 15(32.6%) of the respondents were not sure. On the other hand, most of the respondents, 17(37.0%) agreed with the statement. This indicates that the reading ability of autistic learners in the school is at expected level. This is in line with the work of Giangreco & Broer, (2005) who also noted that teachers have played a very important role in enhancing the reading ability of the learners with ASD. This follows the commitment, knowledge and skills that the teachers have coupled with experience in handling these learners [35].

The implication of these findings is that the attitudes towards mainstreaming of learners with ASD in general education settings were generally positive. This is consistent with other previous studies Avramidis & Norwich, (2012) of teacher attitudes and perception regarding the effectiveness of educational outcomes of the learners with ASD. The results showed that teachers are typically supportive of the general concept of mainstreaming learners with ASD and their educational outcome [7].

G. Qualitative Results from the Observation Sheet

The researcher made an observation in order to ascertain whether the responses provided in the questionnaire could be relied upon in making inference to the entire study. The researcher sought to establish matters of environment order to check whether the schools were conducive for the learners and secondly the researcher sought to, make observations about how the classes were conducted.

In regard to environmental factors the researcher sought to assess ventilation factors, lighting, the classroom size, adequacy of the furniture the condition of the floor and the presence of learning centers. From the results it was observed that in most of the schools the classes were well ventilated due to the presence of large windows and ventilators. Most classes were built according to the requirements of the ministry of education to ensure that they were safe for the learners.

It was noted that the class sizes were adequate but the number of learners were overwhelming. Most classes had more than 40 learners and this was very disadvantages for efficient delivery of the teaching to mainstreamed class, the large numbers made it difficult for the teachers to have extra time to assist the autistic learners.

It was also observed that the furniture's were not in a good condition as most of them were very old and were not even enough for the learners. The floors were in a bad state with some of the classes having earth /marram floors. Those which had been cemented did not look as if they had cement as they had many pot holes. This made the learning condition both the learners and the teachers to pose a very poor environment.

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The schools need to have the learning corner where the learners can have a model shop to display some of the items and display some of the artifacts that aid in making learning effective especially for the learners with challenges like autism. The study noted that the learning environment in most of the schools were not very friendly especially for a mainstream school with autistic learners. This implies that the learners with autistic conditions might find it a challenge to effectively interact with the teacher and other learners for lack of facilities and for poor class environment.

Regarding classroom instructions and activities, the researcher sought to find out whether about how the schools carries out their daily activities and how effective they are linked to the learning of the learners with challenges. The researcher observed that in most of the schools the activities of daily living were not time tabled and in the few schools where; they were timetabled, they were not practiced. The response from the teachers when asked the reason for their lack of commitment on some activities; one of them indicated that;

With all the work load I have, I don't think I will want to add any other task on my shoulders. As you have seen, our classes are too congested with children and there are limited resources in terms of books and time and hence I only concentrate on what I feel is important. She also indicated that, when you look at the nature of the learners in these classes you feel you need to assist but at the same time the work load is to be covered this makes it very difficult to bring in something extra in the teaching.

On the adaptability of the curriculum the researcher established that all that is required by the curriculum is well timetabled and covered and also it is practiced at all levels of learning. Pictures were seen to be missing in most of the schools and this activity was not timetabled at all. The teachers only tried to help develop some and display them for use in their lessons but not for having extra teaching. This affects the effectiveness of learning among the autistic learners as they sometime learn better using visual aid and when these aids are missing sometimes simple concepts can be very difficult to comprehend. Similarly, the researcher observed that majority of the schools lacked the individualized education program which is essential in meeting the needs of the learners with challenges. A study by Kamps et al. (2012) also noted that in most mainstreamed schools the main challenges that are faced not only by the learners but the teachers as a whole revolve around other factors such as scheduling school activities to suite all the learner. They noted that most important activities are not timetabled and to great extent the teachers have limited time to address some of the issues facing the individual learners with ASD [37]. One of the teachers said;

As teachers we really want to assist the learners with autism and other condition so that they can be able to keep pace with the rest of the learners, but we are limited because of the work load. This makes it difficult to have some extra time to develop teaching aids like pictures, help the learners develop the learning corners and have extra time with the learners who are challenged.

These findings clearly indicate that mainstreaming is an important strategy to help the learners with autistic conditions to acquire education with more ease through interaction with other children in the same classroom. The study has noted that when these children are integrated with others the stigma about their condition is minimized and most of them are able to learn with ease and achieve better by becoming self-managed in most areas of their lives in which they were unable to coordinate. The findings of this study have established that there was an association between the teacher's competencies in handling the learner's with ASD, this implies that when teachers are competent with the task at hand they are likely to have a positive impact on learners with ASD and hence enhance their performance. The results are in line with the findings of Goldstein & Cisar, (2012) who also established a positive relationship between mainstreaming and educational experience of learners with ASD, according to the study they noted that when learners with challenges are taught together with those who are not challenged, they gain much confidence as they learn from each other and this enhances their abilities and hence their educational experiences [22].

The implication from this study is that school environment demonstrates a substantial influence with respect to learners with ASD; therefore, this information should be incorporated into training curricula and in-service presentations for teachers. The education of learners with ASD seems to some extent a complicated task, one which must begin with accurate and broad understanding of the disorder, particularly in terms of symptoms and interventions. It is a positive finding that use of reinforcement schedules was cited as an important factor for successful mainstreaming of learners with ASD, and behavior management strategies were reported as one of the most frequently heard of and often used strategies. This agrees with the findings of Simpson (2015) who indicated that Dissemination and implementation of ASD-related information should be multi-dimensional and comprehensive as knowledge and experience of the teachers alone does not predict educational outcome of the learners [59].

Similarly, Corrigan et al. (2001) noted that though experience of the teachers seems to be a highly relevant factor in the prediction of awareness of education strategies for learners with ASD as well as their use, providing teachers and other educational professionals with access to learners with ASD may increase one's knowledge and understanding of practices for mainstreaming. the study suggests that exposure of educators to the learners with ASD during their training is important in ensuring that they acquire more experience in working with these learners with ASD and this will lead to development of more positive attitudes towards these learners [9].

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V. CONCLUSIONS

From the findings of the study, it can be concluded that when learners have conditions like autism and are mainstreamed with those who are not, they are in a better position to learn new things compared to when they are set out alone in their own special schools.

In regard to the first objective the study establish that peer interaction learning was a very good strategy to enhance the education experience of the learners with ASD. Majority of the respondents did agree that the learners were able to effectively develop their abilities though these interactions. The chi square test showed that there was a strong positive association that is very significant between peer interaction learning and education achievement for learners with ASD.

In regard to objective two that sought to assess the effect of learner self-management strategy on education experience of learners with ASD it was established that most of the respondents agreed with the statement meaning that the strategy was appropriate for enhancing education experience. The study therefore concluded that the schools need to use learners' self- management strategy in helping the learners with ASD to acquire knowledge.

It is also concluded that Antecedent Procedures (Priming, Prompt Delivery, Picture Schedules) have an effect on the education experience of learners with ASD. When teachers employ these strategies in teaching these learners, the effect is very significant as shown by the high statistical significance revealed by the chi square analysis.

Finally, the last objective sought to assess the effect of peer mediated interventions on the education experiences of the learners with ASD. The results show that there was a very significant association between the variables and hence the study concludes that by having the able learners and those with ASD condition interact in the same schools plays a very important role in enhancing education achievement of the learners. It is therefore noted that mainstreaming helps learners with different conditions to acquire learning skills effectively and hence this develops their various skills and learn like the other learners.

RECOMMENDATIONS

Based on the findings and conclusions drawn, this study recommends that;

Teachers in primary schools should try and enhance peer interaction among the learners in school in order to assist the learners with ASD. The government through the MoE should however give the teachers more skills on dealing with these learners through seminars and workshops on inclusive education so that they have skills, knowledge and positive attitude on how to handle the learners in classrooms.

Through the government and other stakeholders such as KICD should come up with a curriculum that recommends that teachers need to effectively employ the learner's self- management learning to enhance education acquisition of the learners with ASD. This also require the government to invest more in improving the facilitates at the schools to be able to make the strategy a success.

It was also recommended that the schools teaching model where Antecedent Procedures (Priming, Prompt Delivery, Picture) be adopted among the schools to help make learning a reality to the learners with autistic condition. It is noted that most of these learners have a short concentration span and hence using these antecedent procedures can assist capture their attention and improve learning.

It is also recommended that the use of peer mediated learning be considered as an effective strategy in the mainstreamed schools to enhance the learning process. This might involve sensitization programs for the learners, teachers and parents to all join together and assist the learners with ASD. Therefore, the study recommends that, there should be a joint initiative from the Head teachers, teachers, the parents and the peers in order to assist the learners who have this condition to effectively learn.

ACKNOWLEDGMENT

The authors appreciate Maasai Mara university and National Commission for Science Technology and Innovation (NACOSTI) in Kenya, for their pertinent role in this study's research permit. We also acknowledge and appreciate the respondents who were involved in giving their responses in this study.

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