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**Effects Of Numeracy Corner On Preschool Student Learning Outcomes In Mavoko Sub-County, Machakos County, Kenya**

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**Abstract**

The purpose of the study was to investigate the effects of numeracy corner on preschool student learning outcomes in the Mavoko sub-county, Machakos County, Kenya. The assumption of this study is that preschool classrooms are typically set up around learning stations or interest areas. With the teacher's guidance, these areas allow children to play and explore materials individually or in small groups. Research in Kenya has indicated that the classroom environment communicates to students what is expected of them, conveying to the children the independence and joy of learning. Since the National Policy on Education in Kenya seeks to ensure optimal and qualitative Early Childhood Education, there has been a mismatch between the quality of education in Early Childhood Development and Education (ECDE) and its actual implementation. Because of the performance of learning, some children have performed dismally while others have performed better. Therefore, this study sought to establish the effects of learning (Science and Nature, Numeracy, Literacy, and Creative) corners on preschool academic performance in Mavoko Sub-County, Machakos County, Kenya. The researcher conducted a descriptive survey and used questionnaires to collect data. The researcher sampled 68 pre-school teachers from the 68 primary schools in the study sample that were determined using Slovin's formula cited by Kothari (2014). The findings showed that most preschool teachers (60%) in the study were female, contributing to a significant gender imbalance in the teaching fraternity. Also, it was established that students enjoy lessons once taught in learning corners. Pre-schoolers taught in the learning corners grasped concepts quickly, and that led them to understand the images in a better way. Therefore, it was concluded that learning corners enhance preschoolers' academic performance. The study concluded that teaching corners improves preschoolers' learning outcomes. The findings suggested additional investigation to establish the factors contributing to more female than male preschool teachers in the study area. All preschool teachers should adopt learning corners to instruct their learners to help them enhance their grasping and understanding of concepts, leading to more desirable learning outcomes and improved academic performance. The county and national governments provide the necessary support to preschool teachers to equip them with the right resources and knowledge to execute their teaching mandate.

**Key words:** Kenya, numeracy corner, preschool, learning, Mavoko sub-county, Machakos County

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**1.0 Introduction**

Preschool classrooms are typically set up around learning corners or interest centers. These spaces enable kids to play and investigate materials on their own or in small groups under the teacher's supervision. Low dividers often separate the corners, but children move freely among them. According to Müller and Mildenberger (2021), teachers aim to offer their pupils the best learning environment. For instance, learning centres in the early childhood classroom are the best developmentally proper practice. The learning centres are designated areas where children's learning is enriched. The children work on academic skills by doing varied activities during the school day that allow the pupils to use items provided to create, explore and discover novel ideas. The children choose which learning centres to participate in and use the materials provided. Learning occurs when the children get engaged and are active participants. The learning centres provide the children with hands-on opportunities.

In the United States of America, learning corners were introduced for children between the ages of 0-5 years to assist and bring early childcare within the reach of most American children, particularly those in rural and low socio-economic areas. In America, the learning centre approach employs eight primary learning centres to address the countless objectives of American early childhood classrooms to develop learners' social, physical, emotional, aesthetic and cognitive skills. According to the Stephen F. Austin State University Charter School program, there are eight learning centres in an early childhood classroom, each structured to expand the children's experiences in various meaningful and effective ways (Louzano & Simielli, 2020). Each centre is constructed to encompass several objectives, including state and federal school and community standards.

To help and make early childcare more accessible to most American children, particularly those in rural and poor socioeconomic areas, learning nooks were developed in the United States of America for children between the ages of 0 and 5 years. In order to satisfy the several goals of American early childhood classrooms to develop learners' social, physical, emotional, aesthetic, and cognitive skills, the learning center approach uses eight core learning centers. There are eight learning centers in an early childhood classroom, each designed to broaden the students' experiences in many significant and useful ways, according to the Stephen F. Austin State University Charter School curriculum (Louzano & Simielli, 2020). Each center is built to meet a number of goals, including local, state, and federal educational criteria. The learning centre method focuses on child autonomy and learning style by allowing each student to explore his learning environment hands-on in a developmentally appropriate classroom. In the learning centre approach, teachers are facilitators, providing materials and guidance and planning discussions, demonstrations, activities, and reviews.

In order to encourage children to make decisions, learning centers are often set up in classrooms for primary school students in the United States. The youngsters have more control

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over their activities as they work independently and collaboratively in the centers. One simple way to handle children's learning styles is through the learning centers. For instance, the Sleepy Tigers Chinese Immersion Learning Centre offers a year-round preschool and pre-kindergarten education for kids who are fully potty trained and are 33 months to 5 years old, as well as summer school for kids in grades k–5. The program is a Parent Aware 4-star rated and accredited by the National Association for the Education of Young Children and is fully licensed by the Minnesota Department of Human Service (Louzano & Simielli, 2020). The school is dedicated to high-quality early childhood education, continually offering care and a loving and nurturing environment.

### **1.2 Statement of the Problem**

Many schools indeed have students learn in challenging circumstances that have a negative impact on their students' performance. Most preschool schools still struggle to provide all children with a high-quality education, especially in mathematics, due to the classroom's unfavourable learning environment. There is no better example of the issue than what the Daily Nation (February 12, 2011) and the Standard Newspaper (February 10, 2012) revealed, which showed some kids essentially learning in ripped tents and outside while a teacher was instructing with a student strapped to her back. The foundational ideas and abilities for future learning and operations are laid forth in mathematics for young children. In addition to applying a solid basis for future academic performance, mathematics helps youngsters make sense of the world outside of school (Mwangi, 2009). Thus, further study of the impact of the learning environment is required to develop recommendations for the best course of action for enhancing the teaching of mathematics in preschool settings.

According to Magraner et al. (2019), Learning Corners is a special educational activity for kids that strongly encourages independence and a love of learning. Under the guidance of teachers, it entails all the kids playing and working on various projects in the same classroom. The foundation of Learning Corners is the child-centered approach to teaching young children, which allows kids to choose what they want to do and encourages sociability while they learn. It also incorporates elements of the Montessori method, which allows children of all ages to study together while simultaneously fostering independence and exploratory learning methods (Siqueira et al., 2021). Since the implementation of the National Policy on Education in Kenya seeks to ensure optimal and qualitative Early Childhood Education, there is a mismatch between the quality of education in Early Childhood Development and Education (ECDE) and its actual implementation. As a result of the performance of learning, some children have performed dismally while other children have performed better. Therefore, this study sought to establish the impact of learning corners on preschool academic performance in Mavoko Sub County, Machakos County, Kenya.

### **1.3 Research Objective**

To study the effect of numeracy corner on preschool student learning outcomes

### **1.4 Research Question**

What is the effect of numeracy corner on the learning outcomes of preschool pupils?

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## **2.0 Review of the Related Literature**

### **2.1 Empirical Literature Review**

#### **3.0 2.2.2 Effect of Numeracy Corner on the Preschool Student Learning Outcomes**

Nelson and McMaster (2019) conducted a meta-analysis on the effects of early numeracy interventions for students in preschool and early elementary. This meta-analysis aimed to look at the efficacy of early numeracy treatments for young kids, including those with disabilities or at risk of struggling with math (MD). In order to improve students' math competency in preschool, kindergarten, and first grade, this study evaluated the early numeracy content, instructional components, and methodological components. 34 trials with 52 treatment groups that met the inclusion criteria were included in this meta-analysis. The average weighted impact size for numeracy treatments was moderate ( $g = 0.64$ ), and the 95% confidence interval did not include zero [0.52, 0.76], after two outliers were taken into account. The final metaregression model indicated that therapies involving counting with 1-to-1 correspondence and lasting eight weeks or less would have more noticeable treatment effects. The metaregression results also revealed that interventions were more effective for students with lower levels of risk for MD based on screening criteria compared to typically achieving students; interventions were less effective for students with higher levels of risk for MD based on screening criteria and risk based on low socioeconomic status compared to typically achieving students. Future research directions and consequences for educators using early numeracy interventions are highlighted.

Suwandayani (2020) investigated the implementation of the numeracy literacy program in teaching mathematics remaining in class IV in Muhammadiyah elementary schools. According to the study, government programs create a reading culture and make education program implementers applaud students as literate individuals. The goal of Suwandayani (2020) was to examine the implementation of the numeracy literacy program in grade IV mathematics learning in elementary schools, as well as the supporting and inhibiting elements of the program.

This study was conducted at two Muhammadiyah primary schools in Kota Malang, SD Muhammadiyah 1 and SD Muhammadiyah 5. This study's subjects included the principal as policymakers, class IV instructors, students, and parents. The findings revealed that while contextual and problem-based idea planting were adequate for learning numeracy literacy, projection-based learning was rarely applied. Understanding motivation is also an obstructing element in understanding, but there are helping factors, such as the allocation of funding for numeracy literacy programs and the provision of teacher training for literacy programs capable of correcting current difficulties.

## **2.2 Theoretical Literature Review**

### **2.2.1 Behaviorism**

Behaviourism is a psychological and philosophical movement that emphasizes the outward behavioural aspects of thought and dismisses the internal experiential. John B. Watson coined this theory and advanced it as a perspective on learning that highlights the changes in an individual's observable behaviours- the differences in what people do or say. According to Watson and Kimble (2017), it is a popular theory that focuses on how pupils learn. Graham (2000) states that the theory postulates that all behaviours are learned through learners interacting with the environment. According to John B. Witson, behaviours are learned from the

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environment, and inherited or innate factors have a very minute influence on behaviour. Clark (2018) stated that every teacher knows that they will often have a learner who is challenging to manage in their class. The behaviour is typically challenging to regulate and can be additional work to get the learners to pay attention and stop distracting others (Araiba, 2020).

There are different ways by which other people learn; however, as McCloskey and Silvestri (2021) argued, behaviorist-teaching methods have proven more successful in circumstances with a “correct” response or easily memorable materials. This study considers behaviourism in the following aspects.

### **3.0 Methodology**

#### **3.1 Introduction**

##### **3.1 Research Design**

The researcher implemented a descriptive survey using qualitative and quantitative data to satisfy the researcher's objectives. The descriptive survey is a type of quantitative research; however, qualitative research can likewise be used for descriptive determinations (Zheng et al., 2019). Survey research permitted the researcher to collect vast volumes of data to be analyzed for averages, frequencies, and patterns (Christensen et al., 2011). Descriptive survey research is a method of study that helps the researcher blend quantitative and qualitative data to offer the researcher appropriate and accurate information. In addition, it was a time-efficient research technique involving the individuals at the centre of the research objective (Zainal, 2007).

##### **3.2 Target Population**

In the cost-effectiveness examination, features of the target population and any subcategories were designated clearly (Ackerman et al., 2021). Mavoko Sub County has 82 primary schools, according to the data from the Sub County Director of Education (Machakos County Annual Progress Report 2019-2020, 2020). The researcher targeted the 82 primary schools that have preschools for the current study. The researcher included preschool teachers in the study as the target population.

##### **3.3 Sample Size and Sampling Procedures**

According to the Mavoko Sub County Education Records report, there were 82 elementary schools in the study region. The sample size was calculated at a 95% level of confidence using the formula provided by Kothari (2014), and the 95% confidence interval is depicted below;

$$n = N / (1 + N * e^2)$$

Where:

n = Number of samples,

e = Tolerance for errors (level),

where N = Total Population.

In this case, the sample size will be 68.

$$82 / (1 + 82 * 0.05^2) = 68$$

The researcher implemented simple random sampling to select 68 preschool teachers to include in the study sample. Simple random sampling ensured that all the preschool teachers had equal chances of being selected for the study sample (Cooper & Schindler, 2009). The researcher

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visited the schools before the actual study to seek permission from the Head teachers to include the teachers. During the visit, the researcher coded the schools included in the study. Afterwards, the researcher wrote each code representing the participants on paper, folded it, and put it all in one basket. After shaking the basket, the researcher randomly selects one code at a time from the basket without replacement. The shaking and picking continued until the 68<sup>th</sup> code was assigned. This sampling was the most suitable for selecting the participants in the study because the probability enabled the researcher to represent the target population in the study sample appropriately. The likelihood of a school being included in the study sample was determined as follows;

$$P_i = n/N$$

Where n = sample size

N = the total number of schools in the Sub County

### **3.4 Research Instruments**

To get information from the target population, the researcher used questionnaires. It was a cost-effective method of information gathering (Geisinger, 2010). The questionnaire approach of conducting the survey came at a very low cost. Only paper printing costs for the questionnaire were incurred by the researcher. As a result, gathering data for the research did not come at a large expense. In comparison to other procedures like interviews or observation, it was perhaps the most effective way to gather information because the sample group was dispersed across a vast area. The questionnaire method received responses relatively quickly (Jones et al., 2008). Comparatively speaking, the questionnaire required less planning, creation, and administration. It did not require much technical skill or knowledge. As it was distributed in a written form, its standardized instructions for recording responses ensured some uniformity. The questionnaire did not permit many variations (Lefever & Matthíasdóttir, 2007).

#### **3.4.1 Pilot Study**

The researcher conducted a pilot study in Athi River Primary School in Athi River Sub County to pre-test the validity of the questionnaire before the actual data collection on a convenience sample of 10 respondents within the abovementioned area. Verbal consent was acquired from the pilot sample before data collection by informing the participants of the aim of the exercise. Before the practice, the researcher asked the participants to comment on their understanding of the questionnaire to collect opinions on how it can be simplified to elicit quick responses. The school where the pilot study was conducted and the data collected were not included in the research.

#### **3.4.2 Instrument Validity**

The researcher and the supervisors went through the questionnaire to check if the questionnaire had captured the topic under investigation. The researcher examined the questions for precision, readability, and comprehensiveness to increase the content validity and came to a consensus on some of the items that would be in the final questionnaire. Before the pilot study, the supervisor's advice and opinion were requested. The university supervisors were shown the research equipment for validation. The researcher and the supervisors reviewed the questionnaire to make

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sure that all the variables were accurately collected in accordance with the study objectives and to look for any unnecessary questions that would be confusing to the respondents after they had responded. effectively. They also studied the questionnaire for double, confusing, and misleading questions.

### **3.4.2 Instrument Reliability**

The researcher measured the consistency of the instrument. To ensure the reliability of the questionnaires, the researcher used the test–test reliability (Gerald, (2018). The tools were administered to the same group of respondents after one week. The researcher then compared the responses at the two time points. If the respondents responded to the questions as if they remembered answering them the first time, it gave the researcher artificial reliability.

### **3.5 Data Collection Procedure**

By requesting a letter from Lukenya University's School of Education, the researcher was able to acquire authorization to carry out the study. A research permission was also acquired by the researcher from the National Commission for Science, Technology, and Innovation. The study's purpose was disclosed by the researcher to the County and Sub County Directors of Education. The researcher made appointments to distribute surveys and visited the schools that were chosen for the investigation to get to know the respondents. During the actual study, the researcher provided questionnaires to the respondents. Each respondent was requested to fill in the questionnaires honestly with the assurance that the data collected would be confidential.

### **3.6 Data Analysis Techniques**

The researcher used SPSS version 29 for analysis and pictorial presentation of research. The questionnaires were coded, and data was entered in SPSS version 29. Descriptive analysis was used to summarize continuous variables. Additionally, visuals such as tables, graphs, and charts were used to summarize the research findings.

## **4.0 Findings and Discussions**

### **4.1 Reliability of Research Instrument**

The dependability of this study was evaluated using the Cronbach's alpha coefficient. All of the study items' dependability was found to be 0.8. The study was credible, the researcher determined.

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**Table 1: Reliability Statistics**

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
Influence of Science and Nature Corner	.833	.832	67
Effect of Numeracy Corner	.833	.832	67
Effects of Creative Corner	.833	.832	67
Influence of Literacy Corner	.833	.832	

**Source: Field Data 2023**

## 4.2 Demographics

The study population's demographic characteristics are presented in this section. The demographics of the intended audience were broken down into the following categories: response rate, contact rate, cooperation rate, gender, age, school type where the participant worked, and learning nooks in the classrooms.

### 4.2.3 Contact Rate

The study targeted to reach out to 68 respondents. Of these respondents, the researcher contacted 67 only. The contact rate was computed as shown:

$$\text{Contact Rate} \frac{67}{68} \times 100 = 98.5\%$$

### 4.2.2 Response Rate

They contacted 67 respondents during the study, and only 65 participants could respond to all questionnaire items. The response rate was calculated as shown by the equation below.

$$\text{Response Rate} \frac{65}{68} \times 100 = 95.58\%$$

### 4.2.3 Cooperation Rate

The cooperation rate was calculated as illustrated below.

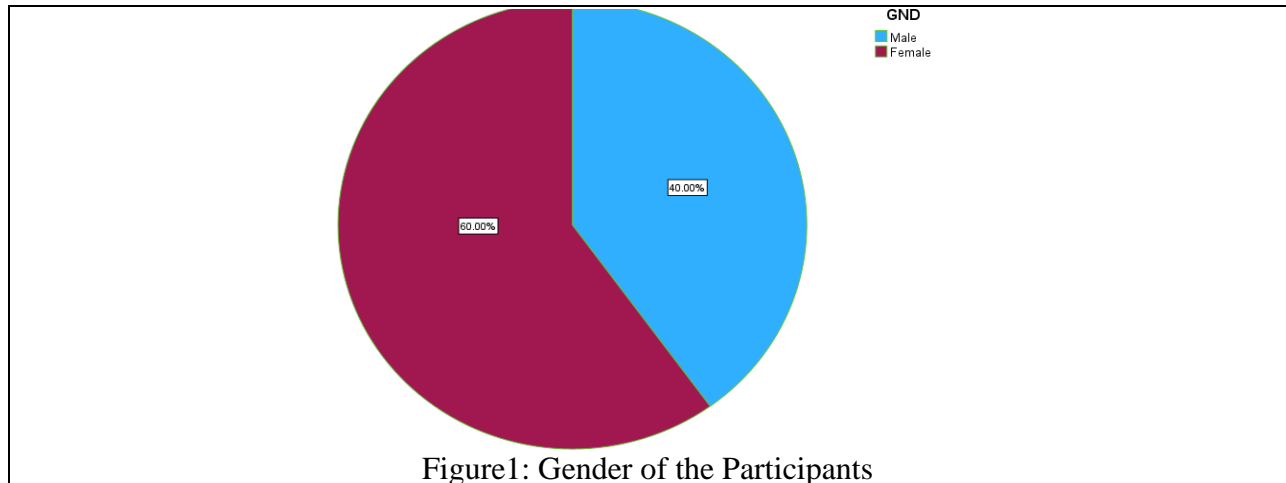
$$\text{Cooperation Rate} \frac{65}{67} \times 100 = 97.01\%$$

### 4.2.3 Gender

The respondents were asked to specify their gender by the researcher. The responses to the survey fell into the male and female gender groups. According to the findings, there were, respectively, 40% and 60% more male and female responders (see Figure 2).



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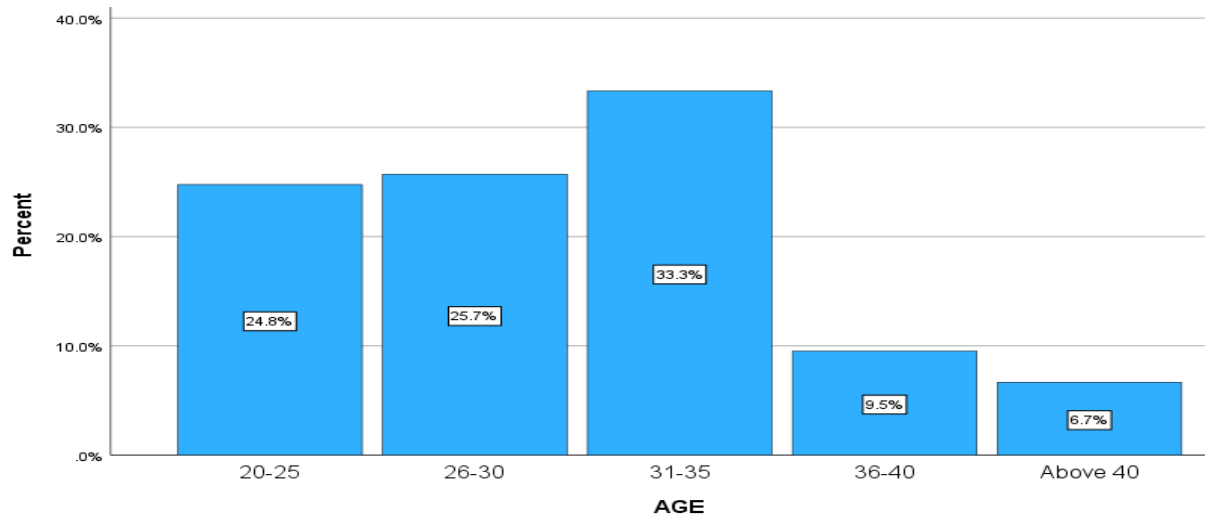
**Source: Field Data 2023**

The statistics above explain that there are more female than male preschool teachers in Athi River Sub County. More female preschool teachers formed the mainstream in the preschools that were included in the study. The results demonstrate a significant gender imbalance in preschools.

#### **4.2.4 Age**

The age of the respondents was categorized into five classes: 20-25, 26-30, 31-35, 36-40, and above 40. The respondents were asked to tick the class in which they were their age. The results were as demonstrated by the graph in Figure 2 below.

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**Figure 2: Age of the Respondents**

Source: Field Data 2023

The results showed that most preschool teachers (84.1%) were aged 35 years and below. Only 15.9% were of the age that was above 35 years. This shows that the preschools' teaching staff comprised young teachers. It implies that more teaching fraternity populations are young in the Athi River sub-county.

#### **4.2.4 School Category**

The researcher asked the respondents whether the schools they taught were public or private. The results showed that more than 65% of the schools included were private, while less than 35% were public. Since the schools were randomly selected, it offers more private than public schools in the study area.

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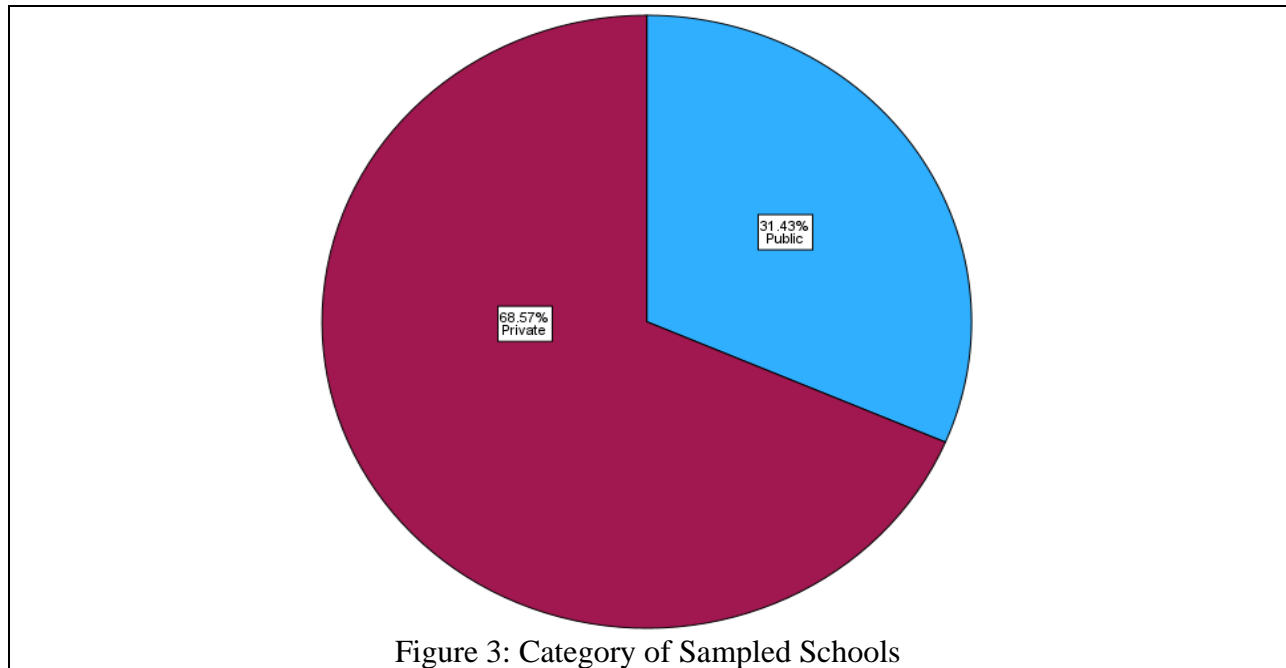


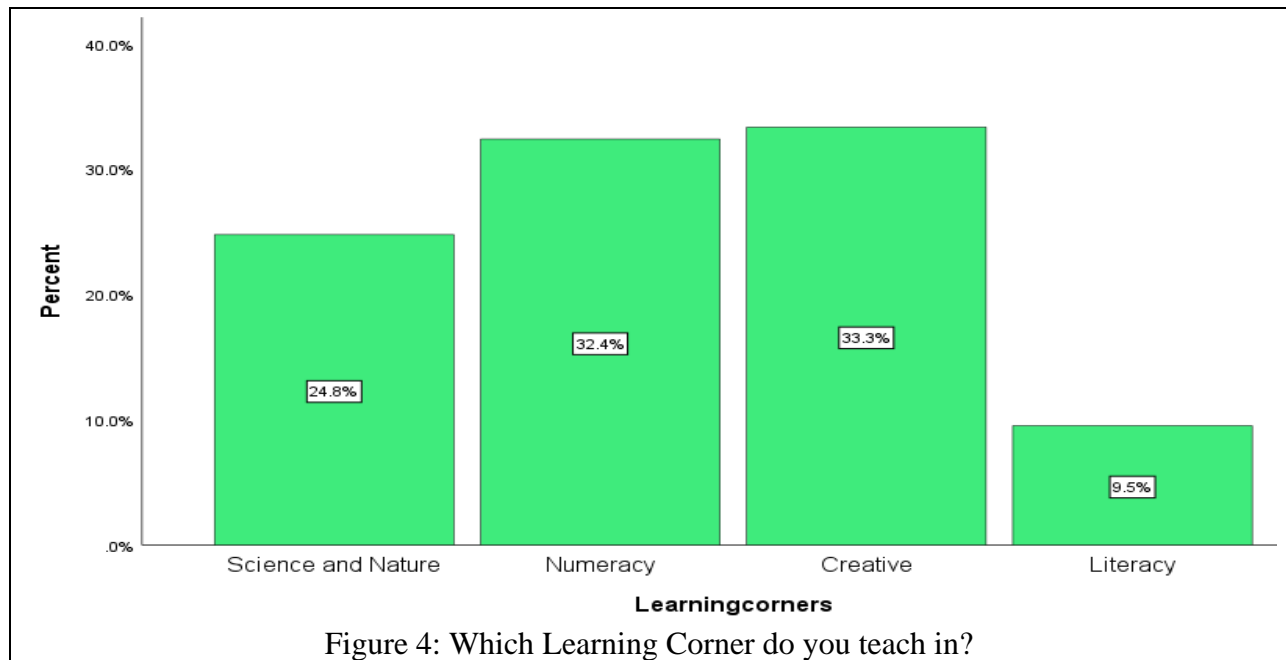
Figure 3: Category of Sampled Schools

**Source: Field Data 2023**

#### **4.2.5 Learning Corners**

The respondents were asked to state the learning corner they teach in. The data obtained from the respondents showed the statistics demonstrated in Figure 6 below. Less than 25% of the preschool teachers led in Science and Nature Corners. 32.4% of the respondents taught in Numeracy Corners, while 33.3% taught in Creative Corners. 9.5% of the respondents were taught in Literacy Corners. The most significant number of the respondents were taught in creative corners, while the least number were taught in literacy corners. Numeracy Corner ranked second as having the second largest number of preschool teachers.

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**Source: Field Data 2023**

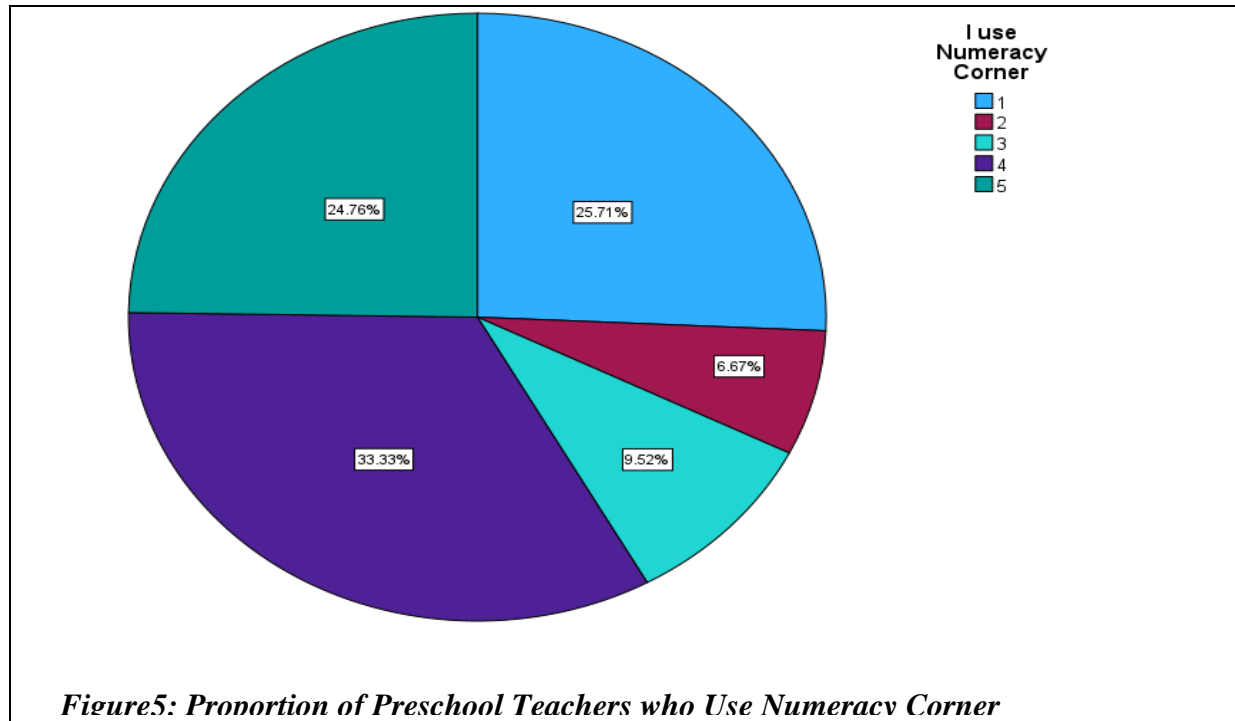
### **4.3 The Influence of Numeracy Corner on the Preschool Student Learning Outcomes**

The researcher sought to establish how the learning numeracy corner influenced the learning outcomes of preschoolers. The study intended to answer the question, “What is the effect of numeracy corner on the learning outcomes of preschool pupils?” The findings of this investigation were discussed hereafter.

#### **4.3.1 Proportion of Preschool Teachers Who Use Numeracy Corner**

The researcher investigated whether the respondents used Numeracy corners during their lessons. The results of the evaluation of the responses collected are shown in Figure 13. 32.38% of the preschool teachers were found to have not used the numeracy learning corner. The proportion that used numeracy corners during their lessons formed more than 65% of the entire population of the study. Despite being higher than that of the teachers who did not use the numeracy corner during lessons, the proportion of teachers who did not use the numeracy corner during lessons is substantial enough to attract investigation into why they do not use the learning. The study deduced that there was a need to conduct further research into the factors underwriting the failure of the preschool teacher to use the numeracy corner during their lessons.

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Source: Field Data 2023

#### 4.3.2 General Students' Feeling for Lessons in Numeracy Corner

The researcher established that most preschool teachers used numeracy corners during lessons. The study investigated how the preschoolers behaved during the classes by determining whether the learners enjoyed the courses. The researcher asked the respondents to rate their learners' feelings toward using numeracy corners. The results are illustrated in the graph in Figure 6 below.

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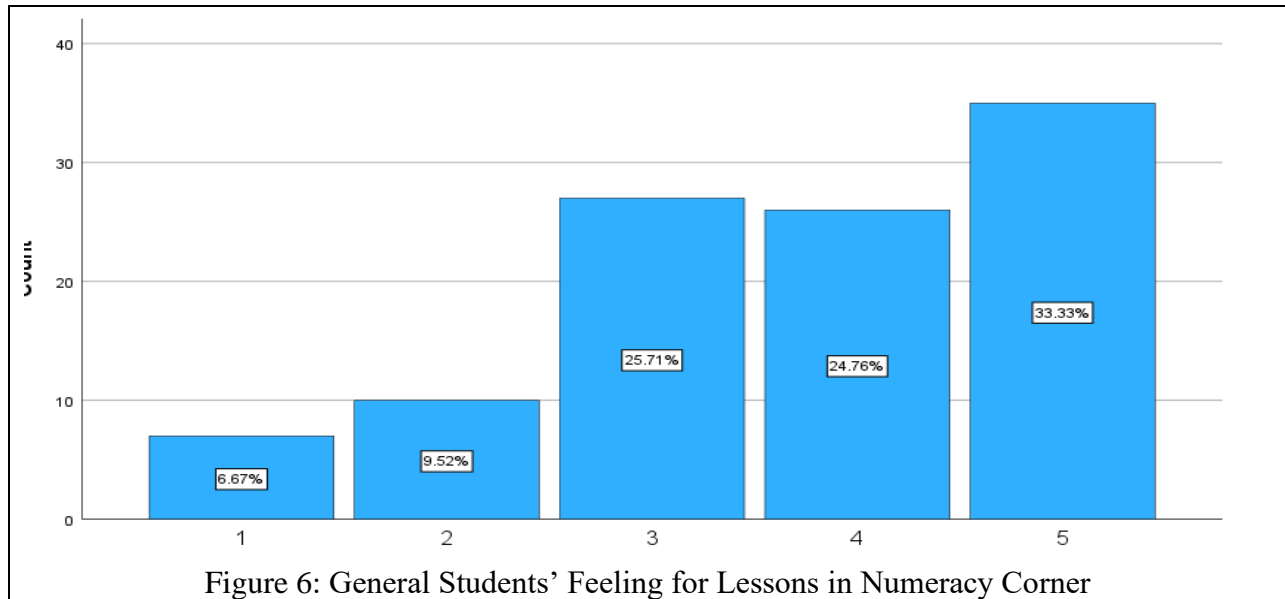


Figure 6: General Students' Feeling for Lessons in Numeracy Corner

**Source: Field Data 2023**

From Figure 6 above, 33.3% of preschool teachers indicated that their learners enjoyed lessons conducted in the numeracy corner. 24.76% of the preschool teachers stated that their students moderately wanted the classes taught in the numeracy corner, while 25.71% postulated that their students somewhat enjoyed the lessons. The proportion contrary to students who did not enjoy lessons in the numeracy corner was 16.19%. From the statistics above, the study concluded that most preschoolers enjoyed classes conducted in the numeracy corner. Therefore, not all preschoolers enjoy lessons taught in the numeracy corner.

#### **4.3.3 Understanding Numerical Concepts Taught in Numeracy Corner**

Tables 4.1 and 4.2 below show the results obtained from the analysis of responses received from the participants of this study. The participants were asked to indicate on a scale of 1 to 5 the extent to which they agreed with the statement that their students grasped and understood numerical concepts better when taught in the numeracy corner than when taught without using the numeracy corner.

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**Table 2: Understanding Numerical Concepts taught in Numeracy Corner**

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	1	10	9.5	9.5	9.5
	2	26	24.8	24.8	34.3
	3	7	6.7	6.7	41.0
	4	27	25.7	25.7	66.7
	5	35	33.3	33.3	100.0
	Total		105	100.0	100.0

**Source: Field Data 2023**

The findings in Tables 4.1 and 4.2 exhibited that most preschoolers grasp and understand numerical concepts better when taught in lessons conducted in numerical corners. This observation was demonstrated by 33.3% and 25.7% of preschool teachers who strongly agreed that their learners grasped and understood numerical concepts better when taught in numerical corners, respectively. 25.7% and 34.3% agreed that conducting lessons in numerical corners enabled their students to grasp and comprehend numerical concepts. Less than 35% and 40% of the respondents stated that there was no difference in students' ability to get and understand concepts whether taught in a numeracy corner. The study concluded that instructing preschoolers in the numeracy corner enhanced their ability to grasp and understand numerical concepts.

**Table 3: Grasping Numerical Concepts Taught in Numeracy Corner**

**N Corner enhances grasping concepts.**

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	2	7	6.7	6.7	6.7
	3	35	33.3	33.3	40.0
	4	36	34.3	34.3	74.3
	5	27	25.7	25.7	100.0
	Total		105	100.0	100.0

**Source: Field Data 2023**

#### **4.3.4 Performance of Preschoolers Who Learn in Numeracy Corner**

On a scale of 1 to 5, the respondents were asked to show how their students performed when taught in the numeracy corner and when prepared without using the numeracy corner. The data obtained were converted into percentages and tabulated, as shown in Table 4.3.

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**Table 4: Performance of Preschoolers Who Learn in Numeracy Corner  
My Students Perform Better when Taught in N Corner**

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	2	7	6.7	6.7	6.7
	3	36	34.3	34.3	41.0
	4	27	25.7	25.7	66.7
	5	35	33.3	33.3	100.0
	Total	105	100.0	100.0	

**Source: Field Data 2023**

Almost a third of the respondents, representing 33.5% of the respondents indicated that their students performed exceptionally well, 25.5% stated fairly well, 34.3% indicated average performance, and 6.7% specified that their students did not show any difference. Therefore, it was concluded that instructing preschoolers in the numeracy corner enhances their academic performance.

## **5.0 Summary, Conclusions and Recommendations**

### **5.1 Summary**

It was shown that 32.38% of the preschool teachers had not used the numeracy learning corner. More than 65% of the participants in the study were those who employed numeracy corners during their courses. The proportion of instructors who did not use the numeracy corner during lessons is significant enough to pique curiosity for further research into why they do not use the learning despite being more effective than that of the teachers who did so.

33.3% of preschool teachers reported that their students greatly valued the numeracy corner lessons they were given. In the numeracy corner, 24.76% of preschool teachers said that their pupils had a moderate level of enjoyment, while 25.71% reported a fair level of happiness. 16.19% of the student population disagreed that the numeracy corner lessons were enjoyable.

The study deduced from the numbers above that most preschoolers preferred sessions given in the numeracy corner. As a result, not all preschoolers find the numeracy corner courses engaging. Most preschoolers learn and retain mathematical ideas more effectively when taught in lessons held in numerical corners. This observation was supported by 33.3% and 25.7% of the preschool instructors, who strongly agreed that teaching in numerical corners helped their students better understand and grasp numerical concepts. According to 25.7% and 34.3% of respondents, teaching in numerical corners helped their pupils better understand and get numerical topics. Less than 35% and 40% of respondents claimed that whether ideas were presented in a numeracy corner or not, there was no difference in the pupils' capacity to absorb and understand them. According to the study, teaching preschoolers about the numeracy corner improved their capacity to absorb and comprehend numerical ideas.



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## **5.2 Conclusions**

The study established that students enjoy lessons once taught in learning corners. Pre-schoolers taught in the learning corners grasped concepts quickly, and that led them to understand the images in a better way. Therefore, it was concluded that learning corners enhance preschoolers' academic performance. The study concluded that teaching corners improves preschoolers' learning outcomes. The findings suggested additional investigation to establish the factors contributing to more female than male preschool teachers in the study area. While working in the math and literacy centres, kids exhibit responsibility. Students should learn how to use resources properly, put things away, and clean up after themselves since doing so will help them become more independent. Students are accountable for their work at learning centres. They start, finish, and clean up after a task. During math and literacy centres, students might also be in charge of assisting others. Students may have to rely on one another for assistance when necessary when the teacher works with a small group in another classroom section. These factors all result in more responsible students in your class.

## **Recommendations**

The study recommended that all preschool teachers should adopt learning corners to instruct their learners to help them enhance their grasping and understanding of concepts, leading to more desirable learning outcomes and improved academic performance. The county and national governments should provide the necessary support to preschool teachers to equip them with the right resources and knowledge to execute their teaching mandate.

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