

**DETERMINANTS OF PRE-SCHOOL LEARNERS' PERFORMANCE IN
PSYCHOMOTOR AND CREATIVE ACTIVITIES IN NZAMBANI SUB-
COUNTY, KITUI COUNTY, KENYA**

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DECLARATION

I declare that this thesis project is my original work and that it has not been presented in any other university for any award

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DEDICATION

This thesis project is dedicated to my parents Mr and Mrs Samuel Kathoka for their great encouragement to pursue higher education.

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ABSTRACT

Psychomotor skills and creativity play an important role for a child's early development in all domains socially, emotionally and physically as well as enhancement of cognitive and language skills. The purpose of the study was to examine the determinants of Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub County, Kitui County. Specifically the study investigated the school environment, pre-school teachers' and parental support as the determinants of learners' performance in psychomotor and creative activities. The study was premised on collective creativity theory and adopted cross sectional survey research design. The study targeted 55 head teachers, 153 Pre-school teachers and 1620 pre-school learners from 55 Pre-schools in the Sub County. The study sampled 17 head teachers, 110 teachers and 1620 learners through census and simple random sampling. Data was collected through Pre-school teachers' questionnaire, head teachers' interview schedule and the Pre-school creative activities observation schedule. The validity of the data collection instruments was ascertained by presenting the instruments for scrutiny by the researcher's two university supervisors. Reliability of the Pre-school teachers' questionnaire was ascertained through test-retest technique. Data was analysed by both descriptive and inferential statistics. Descriptive statistics included frequencies, means and standard deviations while multiple regression analysis was used to test the formulated three hypotheses. Qualitative data was put into broad themes for interpretation. The study found that 68% of the schools' environments were deprived of the essential resources to promote psychomotor skills and creative activities such as playing of musical instruments, painting and thread work. It was also found that pre-school teachers lack sufficient knowledge to guide pupils on psychomotor and creative activities. Although most of the parents did not engage their children in household chores with reference to the teachers and head teachers' report, they allowed them to play, thus, enhancing their psychomotor skills and creative activities. The study's three independent variables which included school environment, teachers' support and parental support contributed 73.6% of variance in Pre-school learners' performance in psychomotor and creative activities ($R^2 = 0.736$). Parental support was the most potent predictor of pre-school learners' performance in psychomotor and creative activities ($\beta = 0.588$, $t(109) = 5.39$, $p < 0.05$). It is hoped that the generated information will act as the reference point as Pre-school teachers, head teachers, parents and CSOs combine synergies and brainstorm on ways to improve Pre-school learners in psychomotor and creative activities. The study recommends that the MOE should organize frequent compulsory in service training to equip all teachers with the appropriate skills and knowledge in psychomotor and creative activities. The study also recommends that teachers should use the locally available materials such as the sisal skipping ropes and beads to ensure pupils are exposed to psychomotor and creative activities. This will boost learners' holistic growth and development as well as enhancing their talents in psychomotor and creative activities.

OPERATIONAL DEFINITION OF TERMS

Pre-school - Refers to an institution for children who are yet to join standard one. It is normally used interchangeably with Pre-primary school, play school or nursery school.

Pre-school Teachers: Refers to teachers who are officially recognized and working in a school, concerned with offering early childhood education to pupils aged between 3 to 5 years, in their respective classes.

Creative Activities: Refers to various activities meant to be done by Pre-school children such as painting, coloring, modeling, threading, singing, reciting poems, drama/concerts, and others.

Curriculum Support Officers: refers to government officials trained and officially assigned the role of ensuring proper implementation of curriculum in schools.

Parental Support in Psychomotor and Creative Activities: refers to the parents' actions such as guiding the learner in home-based assignments, provision of creative materials constant monitoring of the child progress and psychosocial support.

Performance in Psychomotor and Creative Activities: Refers to the extent to which Pre-school learners as a class, are able to perform fine and gross psychomotor and creative activities such as writing, doll dressing, scissors skills, jumping and skipping, drawing, painting, and coloring.

Psychomotor activities- Refers to how the brain's mental processes affect physical movement.

School Environment: Refers to the richness of the school in terms of availability of psychomotor and creative resources and space for these activities.

Teachers' Support in Psychomotor and Creative Activities: Refers to the role of the teacher in guiding children in appropriate and safe use of creative materials and providing opportunities for children to imagine and explain their ideas as they form individual self-concept.

LIST OF ABBREVIATIONS AND ACRONYMS

CBC	Competence Based Curriculum
CSO	Curriculum Support Officer
ECDE	Early Childhood Development Education
KICD	Kenya Institute of Curriculum Development
KNBS	Kenya National Bureau of Statistics
KNUT	Kenya National Union of Teachers
MOE	Ministry of Education
NACOSTI	National Council for Science, Technology and Innovation
NGO	Non-Governmental Organization
PTA	Parents Teachers Association
SMC	School Management Committee
SPSS	Statistical Package for Social Scientists
TSC	Teachers Service Commission
UNESCO	United Nations Educational, Scientific and Cultural Organization
USA	United States of America

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter provides the background to the study and the statement of the problem. The chapter also contains the purpose, objectives, hypotheses, significance, scope, delimitation, limitation and assumptions of the study. The chapter culminates with delineation of the study's theoretical framework and conceptual framework.

1.2 Background of the Study

The mastery of the basic skills of reading, writing and math is no longer enough to sustain one in 21st Century (Greenberg, 2014; Wagner, 2008). Instead, work, learning and citizenship require all people to know how to think – to reason, analyze, weigh evidence and problem solve. Greenberg (2014) further reiterates that children will need seven basic survival skills to succeed in the world that awaits them. These skills include critical thinking and problem solving, agility and adaptability, collaboration across networks and leading by influence, initiative and entrepreneurialism, effective oral and written communication, curiosity and imagination, and accessing and analyzing information.

To achieve these objectives, Dere (2019) emphasizes the need to enhance the children psychomotor skills and creativity. The component of Pre-school curriculum that entails psychomotor and creative activities aims at maximizing the social-emotional, motor, linguistic and cognitive development of children and to enable them to gain self-care skills and to be ready for Pre-school, as well. In concurrence, Terrón, Queralt, Molina and Martínez (2017) posit that this kind of education should foster the physical, emotional,

and intellectual development of the child, giving special relevance to knowledge, appreciation, and control of their own bodies.

The psychomotor education is an important component for reaching a progressive autonomy of the child in relation to the world of others (Gil-Madrona, Honrubias, Rodenas & Llanos, 2018). Unlike the natural functions like sleeping, walking and talking, thinking is a skill that needs to be developed, and people do not necessarily become wiser as they become older (Bakken, Brown, Downing, 2017; Fisher, 2005). Greenberg (2014) observes that children learn to think when adults inspire their imaginations and ask questions that get them to think, engage them in meaningful conversations, and allow them to engage in self-directed safe activities. This is exactly the approach that needs to be incorporated into both home and school environments. Thus, the teachers' role needs to be redefined to move from primarily being the information keeper and dispenser to being an orchestrator of learning where knowledge is co-constructed with the student. Further, to foster knowledge generation as opposed to knowledge delivery in line with the demands of 21st century, schools need to create a "culture of inquiry" that is shared equally by teachers and students (O'Conner, 2017).

Creativity can be viewed as an act of transforming our imagination and ideas into reality. Salamatu, Sa'ad and Abdullahi (2017) regard creativity as a novel and appropriate response to an open-ended task. With no clearly identified outcomes or products, children will get an opportunity to explore new possibilities. Thus, creativity is as an imaginative activity design into a form to produce the outcomes that are both original and of value (Papaleontiou-Louca, Varnava-Marouchou, Mihai, & Konis, 2014). Creativity plays an important role for children's early developments in all domains like cognitive skills,

In cognition of the importance of development of psychomotor skills and creativity in early childhood, many countries have entrenched creativity and psychomotor skills as part of early childhood education curriculum. In Turkey, the early child development education (ECDE) curriculum aims at providing children with rich learning experiences (Dere, 2019). According to the Turkey Ministry of National Education (2018), the aim is to maximize the motor, linguistic, social-emotional, and cognitive development of children and to enable them to gain self-care skills and to be ready for pre-primary school, as well. However, the Turkey ECDE curriculum has not considered creativity and psychomotor skills as an individual field of instruction.

In Australia, several studies show that children's free time in both educational and home settings, has become more sedentary and highly scheduled, resulting in a predominance of indoor activities and a disconnection from the natural world (Elliott & Davis, 2009; Ward, 2014). Furthermore, manufactured play equipment and surfaces have become common design elements in outdoor spaces in Australian early childhood settings (Wyver, Tranter, Naughton, Little, Sandseter, & Bundy, 2019). Thus, the use of plastic equipment and synthetic ground covers has further restricted young children's opportunities for engaging with nature, therefore compounding the disconnection from the natural world. Nonetheless, the Australian Early Years Learning Framework (EYLF) advocates a play-based pedagogy maintaining that play provides opportunities for children to expand their thinking, enhancing their desire to know and learn (Arthur, Beecher, Death, Dockett, & Farmer, 2015).

In Tanzania, Mghasse and William (2016) reiterates that the general purpose of pre-primary 2 education is to prepare children physically, emotionally, socially and mentally

before entering grade I of primary school education. However, as Shemahonge (2018) observes, the acute shortage of qualified teachers, classrooms, and teaching and learning materials has become a major hindrance to provision of quality Pre-school education in Tanzania. Thus, in an environment where learners lack proper guidance and materials geared to elicit their creativity and exercise their motor skills, imagination and novelty are severely curtailed. Mtahabwa and Rao (2019) lamented of the mismatch between pre-school educational policies and actual practice in Tanzania. In a study involving 15 pre-school lessons from two urban and two rural schools, Mtahabwa and Rao (2019) found that although the national educational policy specifies the same standards for pre-school education regardless of location, there were considerable differences across schools. The rural schools had larger group sizes, considerably less space, less favorable teacher/pupil ratios, less qualified teachers, and fewer instructional resources compared to urban schools. Additionally, the teacher professional qualifications were found to influence the quality of classroom interaction more than the resources and the physical setting.

In Kenya, the content-based curriculum has been replaced by competence based curriculum (CBC); a new system of education designed by the Kenya Institute of Curriculum Development (KICD) team and launched by the ministry of education in 2017 (Nyakang'i, 2019). The CBC is designed to emphasize the significance of developing skills and knowledge and their application to real life situations. This curriculum emphasizes hands-on experiences as learners manipulate models and real objects. Interaction with nature is also emphasized whereby learners are encouraged to observe living and non-living things in their immediate surroundings as well as during nature walk, field trips or visits to places of interest (Fundi, 2019). These activities are expected to greatly enhance

children creativity and psychomotor skills. The curriculum has clearly identified core competences to be acquired by learners as they engage in activities in different learning areas (KICD, 2017). These core competences include critical thinking and problem solving, communication and collaboration, imagination and creativity, digital literacy, citizenship, learning to learn and self-efficacy (Nyakang'i, 2019).

At pre-school level, the curriculum covers the following learning areas: mathematical, language, environmental, religious education, psychomotor and creative activity areas. According to KICD (2017), psychomotor and creative activities take the most lessons (32%) in a week. This demonstrates the government commitment regarding the development of the children's fine and gross motor skills aimed at enhancing exploration and development of personal talents as well as appreciation of cultural heritage. However, despite the well laid out policies, the implementation part has been found to be a challenge in many developing countries (Mtahabwa & Rao, 2019). Moreover, Golding, Emmett, Iles-Caven, Steer and Lingam (2014) noted that although much of children's motor skills have a heredity component, at least half of the variance is likely to be influenced by the environment. Thus, it is important to ascertain features of the environment that are responsible so that toxins can be avoided, children at risk can be identified and beneficial interventions initiated. Bakken, Brown, and Downing (2017) posit that the quality of family environment seems to be directly associated with the motor performance of the family members.

Bakken et al. (2017) further, consider the school environment as one of the factors that have influence on children's psychomotor and creative development since most children spend many hours a day in school. In order to trigger children imagination, Pre-

school teachers should provide children with creative materials, opportunities to imagine and to explain their ideas, encourage their different viewpoints and appreciate children's individuality (Dere, 2019). Children should also be encouraged to participate in creative games; new products get valued to inspire confidence. In a nutshell, the Pre-school teachers support is essential in enhancing children psychomotor skills and creativity.

According to Kitui County census report of 2018, about 50% of the 55 private and public Pre-schools in Nzambani Sub County are characterized by lack of trained teachers, lack of creative materials, inhabitable classrooms and poor management (MOE, 2018). As such, the county report cast aspersions on the successful implementation of CBC curriculum and more so the newly emphasized component of psychomotor and creative activities. Although most of Pre-schools are housed in brick houses, most of classrooms were found to have dusty rugged floors, unfinished walls, doors and windows most appeared as an afterthought after construction of the primary school. The county schools census report went after and censured the waning parental support and nonchalance disposition since the new constitutional dispensation where management of the Pre-school education was put under county officials in Kenya. However, some of the Pre-schools located near the market centers were reported to have well-constructed and equipped classrooms and manned by trained teachers. Moreover, unlike in urban centers most of Nzambani Pre-schools had ample space for children play and recreation.

In view of the Kitui County schools census report and the researcher's preliminary Pre-schools' survey, there is a need to establish the extent to which the school environment, the Pre-school teachers support and the parental support promote the Pre-school pupils' psychomotor skills and creativity, the hallmark of CBC. The findings would enable the

national and county governments, parents and other stakeholders to address the determinants of Pre-school children performance in psychomotor and creativity from a well-informed point of view.

1.3 Statement of the Problem

The Kenyan competence-based curriculum is designed with the objective that at the end of each learning cycle every learner will be competent in the following areas: critical thinking and problem-solving; communication and collaboration; imagination and creativity; self-efficacy; digital literacy; and learning to learn. In consideration of the six core competencies, it is certain that creativity and psychomotor skills assume a critical role. The KNUT (2017) report cited several hinderances to CBC implementation such as lack of resources and infrastructure required for learning, assessment and capacity-building in the CBC approach; teachers unpreparedness and parents and other stakeholders lack of awareness and consultation.

To enhance creativity and psychomotor skills among Pre-schools, KICD (2017) recommends several activities where the teacher and parent must cooperate and provide an enabling environment for the children to realize their potential. However there have been research gaps pertaining the determinants of pre-school learners' performance in psychomotor and creative activities in education in Nzambani Sub-county despite the introduction of CBC which supports the implementation. Therefore the study focused on the school environment, pre-school teachers' support and parental support learners' performance in psychomotor and creative activities in Nzambani Sub-county, Kitui county.

1.4 Purpose of the Study

The purpose of the study was to examine the determinants of Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub County, Kitui County.

1.5 Objectives of the study

The study was guided by the following objectives:

- (i) To identify the influence of school environment on Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub County, Kitui County.
- (ii) To examine the influence of Pre-school teachers' support on learners' performance in psychomotor and creative activities in Nzambani Sub-County, Kitui County.
- (iii) To establish the influence of parental support on Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub-County, Kitui County.

1.6 Hypotheses of the Study

The study was guided by the following null hypotheses:

HO₁: School environment has no statistically significant influence on Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub County, Kitui County.

HO₂: Pre-school teachers' support has no statistically significant influence on Preschool learners' performance in psychomotor and creative activities in Nzambani Sub County, Kitui County.

HO₃: Parental support has no statistically significant influence on Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub County, Kitui County.

1.7 Significance of the Study

Significance of a study shows how the research benefits or impacts others in part or whole (Simon & Goes, 2013). The study's findings may be important to KICD, MOE, head teachers, teachers, parents, curriculum support officers (CSOs), Non-Governmental Organizations (NGOs), researchers and other Pre-school stakeholders in ensuring that psychomotor and creative activities are an integral part in school curriculum thereby enhancing pupil psychological and physical development. .

This study brings to the fore the level of Pre-school learners' performance in psychomotor and creative activities. The generated data served as an important feedback to KICD curriculum designers and the MOE policy formulators. The generated information establishes whether the objectives of CBC have remained a mere political rhetoric or have been actualized. Additionally, information on level of performance of Pre-school learners are an important feedback to Pre-school teachers, head teachers and parents being the frontline implementers of psychomotor and creative activities curriculum implementers. Thus, the generated information informed their future corrective and improvement measures.

The study also established the extent to which the school environment (availability of materials and space), teachers' support and parental support have influenced the Pre-school learners' performance in psychomotor and creative activities. The generated information is also crucial to KICD and MOE as the two bodies aim at avoiding the pitfalls

that have influenced implementation of CBC in some African countries such as Tanzania and Senegal faltering in their set objectives. Moreover, this study provides a solid platform for future intervention programs in preventing psychomotor difficulty in a sub county context. The generated information acts as the reference point as Pre-school teachers, head teachers, parents and CSOs combine synergies and brainstorm on ways to further improve Pre-school learners in psychomotor and creative activities. The study also served as the reference point to other researchers in the field of ECDE.

1.8 Scope of the Study

The scope of the study is the geographical and methodological limits within which the study operates (Marylin & Goes, 2013). The study was conducted in Nzambani Sub-County, Kitui County, Kenya. Data was collected from 55 private and public Pre-schools in Nzambani Sub County. The study adopted cross sectional survey design in which data was collected at one point from a sample selected to describe some large population at that time.

1.9 Delimitations of the Study

The delimitations of the study are the boundaries set by the researcher by conscious exclusionary and inclusionary decisions regarding the subject of interest (Simon & Goes, 2013). Delimitations are within the researcher's control. There are many factors that may influence Pre-school learners' performance in psychomotor and creative activities. However, this study focused on the influence of school environment, teachers support and parents support being the prominent factors emerging from the reviewed literature.

1.10 Limitations of the Study

Limitations are possible short comings or influences that can affect the study and are not under the control of the researcher. They limit the extent to which a study can go and may affect the end results of the study (Simon &Goes, 2013). According to Sharma (2008), individuals tend to over-rate themselves on desirable traits and under-rate themselves on undesirable traits. Pre-school teachers may therefore, tend to overate themselves on desirable traits and underate themselves on issues with little societal approval. However, to mitigate against such a tendency,the head teachers interview schedule was employed to triangulate the gathered information.

1.11 Assumptions of the Study

Simon (2011) explicates that assumptions are underlying ideologies that the researcher trusts or admits but that are difficult to attest in any actual way. In other words, assumptions are realistic expectations believed to be true facts necessary for the relevance of the study as they provide the basis of the development and implementation of the research. Similarly, Merriam (2014) regards assumptions in research as truthful observations acknowledged to be true but not actually confirmed. There are necessary elements required to enable and conduct this study.

The study assumed that all the Pre-schools under the study had embraced the CBC fully regarding the content and teaching approaches. It also be assumed that parents had been sensitized in regard to their roles in the new curriculum. It further assumed that Pre-school teachers and head teachers had received the minimum knowledge and could accomplish the psychomotor and creative activities set objectives. Finally, the study had

an assumption that the respondents would give accurate responses to the questions raised through questionnaires and interview schedules.

1.12 Theoretical Framework

The theoretical framework is the configuration that supports a theory of a research study and explains why the research problem which is being studied is present (Jones, 2010). The study was premised on collective creativity theory by Vygotsky (1930). Vygotsky believed that creativity arises from any human activity that produces something new. Creative acts could lead to production of anything from music, physical object to a new mental construct. Creativity is therefore present when major scientific, artistic and technical discoveries are made. Creativity also exists whenever an individual combines and alters images or makes something new. According to Vygotsky, creativity exists in all people, including very young children. Further, imagination is an integral part of creativity since it supports the production of new combinations of pre-constructed things.

The concept of collective creativity arises from the argument that creativity is a process that recombines and extends on pre-existing discoveries. Vygotsky advances that the phenomenon of collective creativity, is such that many drops of individual creativity that are often insignificant in themselves, implying that an enormous percentage of what has been created by humanity is a product of the anonymous collective creative work of unknown inventors. This line of thought is useful in linking imagination, lived experience and play to children's learning. Human activity is emphasized as the core driver in the creative process. This is great in acknowledging the active role children play in facilitating their own learning. However, an emphasis on human activity that requires psychomotor skills is also limited in that it does not look at the role of non-human things, like materials

and nature, and how these also influence the creativity process. Vygotsky also made a clear distinction between culture and nature regarding culture as the product of human-mediated creative activity. This creates a separation between human and non-human things.

Vygotsky collective creativity theory is relevant in the study in that the envisaged Pre-school learners' level of performance in psychomotor and creative activities is as a result of cumulative experiences and interactions with their surroundings. In such environments, learners can recombine and extend on pre-existing discoveries. For instance, when learners are exposed to computers through enjoyment of simple games, they get an opportunity to explore more and may later improve on the original basic idea. It then follows that, to enhance the Pre-school learners' psychomotor skills and creativity, the teacher and the parent must play a key supportive role of providing conducive environment for spontaneous child novel activities. This can only happen when the rules of engagement are flexible and the incidences being right or wrong are highly minimized. Thus, in line with the Vygotsky theory of collective creativity, teachers should build on what the child has learnt at home and likewise the parent should reinforce the school experiences by encouraging the child morally and physically.

Since the school is a formal organization, and the teachers are working to achieve the preset objectives, then the condition of the school environment becomes an important factor in releasing the learners' potentials in psychomotor and creative activities development. Vygotsky stressed that imagination plays a crucial role in creativity and as such, school environments with variety of creative materials and adequate space may trigger learners' imagination as the see, smell and manipulate the materials.

1.13 Conceptual Framework

According to Creswell (2014), a conceptual framework is a research tool intended to assist a researcher to develop awareness and understanding of the situation under scrutiny. Creswell further contends that when clearly articulated, a conceptual framework has potential usefulness as a tool to assist a researcher to make meaning of subsequent findings. Orodho (2012) regards a conceptual framework as an imagined model recognizing the concept under study and their connection. Figure 1.1 depicts the proposed study conceptual framework.

Independent Variables

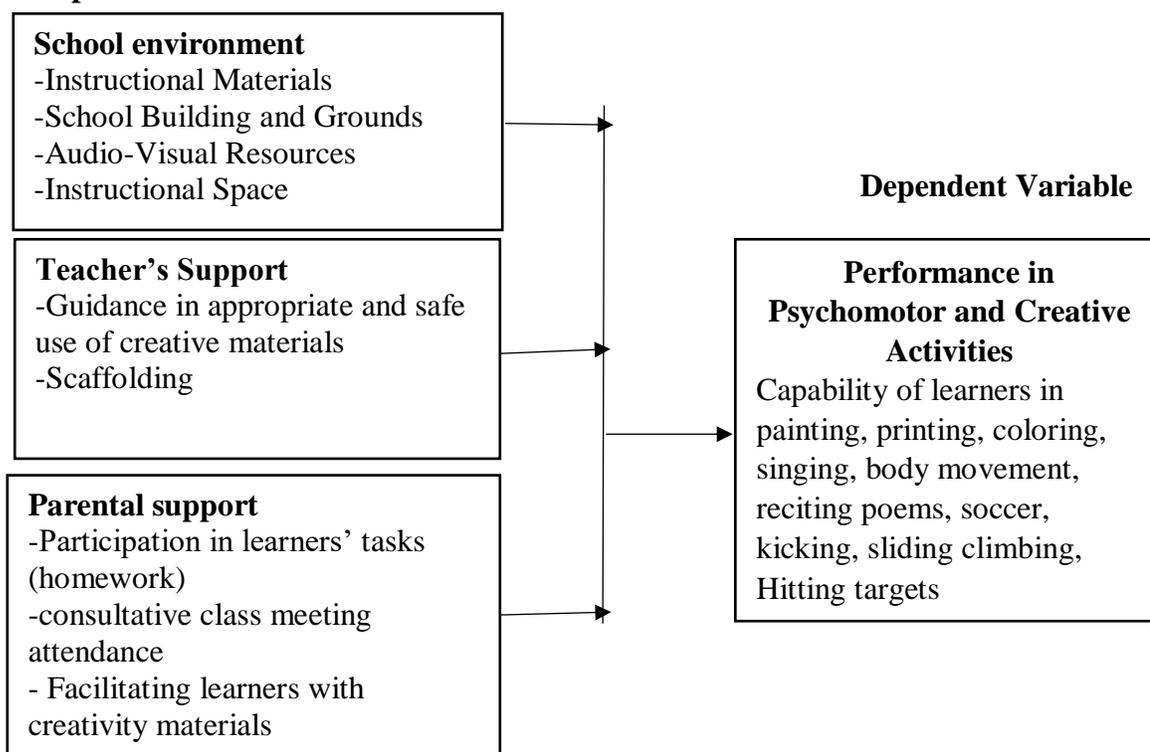


Figure 1.1: Determinants of Pre-school Learners' Performance in Psychomotor and Creative Activities

According to Figure 1.1, the three independent variables were conceptualized to have a relevant and relative influence on the performance of Pre-school learners in

psychomotor and creative activities. In other words, school environment, teachers' support and parental support hypothesized to influence the Pre-school learners' performance in psychomotor skills and creative activities.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews relevant literature in view of the research problem. The chapter begins with the theoretical review. The empirical review is based on the determinants of pre-school learners' performance in psychomotor and creative activities. The literature review is based on recent text books, journal articles, internal and national policy documents on teacher guidance. The chapter ends with the summary of reviewed literature and research gaps.

2.2 Empirical Review

This section presents an empirical review of literature on the area under study. It captures the influence of the school environment, teachers support and parental support on learners' performance in psychomotor and creative activities.

2.2.1 School Environment and Learners Performance in Psychomotor and Creative Activities

Psychomotor and creative activities maximize the social-emotional, motor, linguistic and cognitive development of children and enable them to gain self-care skills and to be ready for primary school, as well (Dere, 2019; Terrón et al. 2017). In cognizance of this fact, many countries, Kenya included, have psychomotor and creative activities as part of Pre-school curriculum. Studies have established that child psychomotor development is a function of heredity as well as environmental factors (Henderson, Grode, O'Connell, & Schwartz, 2015; Jing Hua et al. 2016; Salaj, Benke & Simunovic, 2017). Home is one the environment that has been much studied in regard to facilitation of

children's psychomotor and creative activities. Home is a primary medium for motor learning and development. Salaj et al. (2017) assert that the availability of stimulating objects within the home, such as toys and other play materials is a critical pointer of the quality of home environment.

Venetsanou and Kambas (2016) found that the presence of simple games equipment such as balls, skipping ropes and toy cars have been observed to have a positive association with motor skill proficiency when adjusted for children's age. Further, Venetsanou and Kambas (2016) observe that family features, such as mother's educational level, socioeconomic status, and the existence of siblings can affect children's motor competence. Thus, disparities in rearing conditions have been identified as significant factor that account for observed differentials in children psychomotor performance. However, Jing Hua et al. (2016) observe that since most school going children spend a significant part of the day at school, the influence of the school environment on children's motor development merits examination. The study aimed at examining the condition of Pre-school's environment in terms of available materials and space for creative activities and their influence on children performance in psychomotor and creative activities in Nzambani Sub County.

Jing Hua et al. (2016) investigated the effects of home and education environments on children's motor performance in China. The study conducted a cross-sectional study of 4001 Pre-school children selected from 160 classes. The children's motor performance was assessed using an established assessment criterion. Validated checklists were used to gather information about home and educational environments. Using multilevel and mixed logistic regression models, the effects of home and educational environments on motor performance were analyzed. The findings showed that home environment is positively

associated with the children's motor performance. A unit increase in the outside space of the family home was positively associated with 0.104 unit increase in the total test score. For instance, children scored 0.037 unit increase in the subtest of aiming and catching and 0.034 unit increase in balance after adjusting for potential confounders (each $p < 0.05$).

About school environment, class activity, space and furnishings and interaction in the classroom showed a significant positive association with total test score. The results showed that furnishings in kindergartens and enough space was a protective factor for poor motor performance. It was thus evident that teachers need to be familiar with the fundamental principles of classroom arrangement. Proper classroom arrangement is crucial in enhancing psychomotor and creative activities for children. Additionally, the furniture and learning materials should be adapted to maximize the participation of children with disabilities. Jing Hua et al. (2016) also noted that children's motor development was greatly enhanced by handling of motor toys in form of manipulative materials, musical materials, body exploration materials and locomotor materials. However, Jing Hua et al. study had several gaps that were noteworthy. For instance, apart from furniture arrangement and spacing in the classroom, other dimensions of teachers' support of Pre-school learners were not investigated.

Vanderloo, Tucker, Johnson, Burke and Irwin (2015) submit that apart from providing materials for learners' manipulation, teachers' competency and extent of psychological and physical support have a major contribution to children's psychomotor development. Moreover, Jing Hua et al. (2016) study gave a wide berth to the outdoor spaces influence to children motor development. Since the research was mainly observational study, limited information was provided for uncovering causal associations.

Additionally, owing to the large sample (4001), correlations may easily reach the level of significance that may not be clinically relevant.

Salaj et al. (2017) examined influence of home environment size on motor proficiency of Pre-school children in Croatia. The study sample consisted of 259 Pre-school children and their parents. The research found that living area size with a mean value of 92.11m², was significantly correlated to child's motor proficiency ($r = 0.16$). However, yard area with a mean value of 343.58 m² was not significantly correlated ($r = 0.12$). It was also noted that both living and yard area size were poorly correlated to the children motor proficiency. The study attributed this to the possibility that most children were physically active in the school environment and which was not among the variables considered by that study. The study aimed at establishing the influence of school environment on Pre-school children psychomotor and creative activities in Nzambani Sub County.

Dere (2019) investigated the Creativity of Children in Early Childhood Education Institutions in Turkey. The study adopted quasi-experimental design in which 184 Pre-school children located in the city of Ankara were involved in pre-and post-tests. Yates and Twigg (2017) explicates that, creativity is the basis of the Turkey National Pre-school curriculum. The curriculum is child-centered and focuses on learning by discovery. Additionally, it is eclectic, play-based, gives importance to family education, takes universal values into consideration, and encourages daily life experiences. It also encourages adaptations for children with special needs and multifaceted assessment.

Dere (2019) study was guided by the question of whether the Pre-school education affected the creativity of children in terms of fluency, elaboration, originality, abstractness

of titles, overall creativity strength ratings, resistance to premature closure, overall figure, and overall figural creativity. The results of the paired samples t-test for the comparison of the pre-test and post-test showed that Pre-school curriculum increased children's creativity in a positive way. It is however, important to note that all the participants were from Pre-schools in the city of Ankara and hence most likely exposed to the same level of rich creative materials. In contrast, the proposed study will be conducted in schools with varied levels of availability of creative materials. Further, since the study employed quasi-experimental design the cause effect could not be inferred with complete certainty. The absence of the control group affected the study internal validity. Children improvement in creativity and psychomotor skills could also be attributed to the natural psychosocial growth stages as advanced by Peaget (1956).

In Kenya, Melly and Mwangi (2017) embarked on a study to establish the influence of selected factors on the level of implementation of Pre-school creative activities curriculum in Njoro Sub- County, Nakuru County. The study specifically sought to establish the influence of Pre-school teachers' attitude towards creative activities, the level of integration of creative activities in teaching and learning and the provision of resources for creative activities on the level of implementation of creative activities curriculum. The research employed exploratory survey design and used questionnaires and interview guides to collect data from 80 Pre-school teachers and 12 head teachers respectively. The study findings indicated that head teachers were nonchalant towards how teachers integrated creative activities in teaching and learning. Further, teachers indicted their head teachers of relegating provision of essential materials for creative activities to the periphery. Half of the schools sampled lacked essential creative activity resources. Implementation of

creative activities curriculum was found to be average. However, provision of creative resources was found to have an insignificant influence on implementation of creative activities curriculum at 95% confidence level ($\beta = 0.139$, $t=1.44$, $p=0.154$). The proposed study aims at establishing the level of psychomotor and creative resources and their influence on learners' performance in creativity.

In a similar study, Mokaya (2019) investigated the influence of school -based factors on Pre-school children participation in creative activities in Marani Sub-County, Kenya. The study aimed at establishing the influence of teachers' attitude towards creative activities, assessing the influence of availability of teaching and learning resources, and examining the influence of teachers' professional development on Pre-school learners' participation in creative activities in Marani sub-county, Kisii County. The study sampled 36 Pre-school teachers, 18 head teachers and 845 Pre-school children. It was found that most of teachers had positive attitude towards creative activities and that Most of ECDE centres had inadequate educational resources while most of Pre-school teachers required professional development regarding creative activities. Availability of teaching and learning resources for creative activities had the most significant influence on the Pre-school learners' participation in creative activities ($\beta = 0.523$, $t = 4.526$, $p < 0.05$), followed by the teachers' professional development ($\beta = 0.429$, $t = 3.481$, $p < 0.05$). However, it is noteworthy that Mokaya (2018) study used a relatively small sample of 36 public Pre-school teachers and who were the main source of the analyzed data. The use of a small sample size may result to less accurate results. The study involved Pre-school teachers from both public and private Pre-schools and whose number almost doubled the number of the involved in the study.

2.2.2 Teachers Support and Learners Performance in Psychomotor and Creative Activities

At the Pre-school level, availability of stimulating objects and ample space for children may not on their own achieve the desired level of psychomotor and creative activities. The Pre-school teacher role becomes crucial in guiding the children in the appropriate use of materials, provide opportunities to imagine and explain their ideas, and boost their confidence as they form individual self-concept (Dere, 2019).

However, Greenberg (2014) examines the inevitable changing role of the 21st Century teacher whose learners focus is shifting from hours of memorizing information to be regurgitated in response to teachers' questions or during a test or examination to critical thinking. Moreover, the effort that used to be put in retaining learnt facts from various subjects is no longer needed at the onset of Worldwide Website such as 'Google'. The shift and emphasis on critical thinking has been occasioned by the emerging global challenges that are beyond the mastery of the basic skills of reading, writing and numeracy. Instead, work, learning and citizenship in the 21st century demand that we all know how to think – to reason, analyze, weigh evidence and problem solve (Greenberg, 2014). The novel approach is viewed as the best way to tackle average to complex life-threatening issues such as global climate change, elusive viral diseases, cancer and human conflict. According to Wagner (2008), children will need seven basic survival skills to succeed in the world that awaits them: critical thinking and problem solving; agility and adaptability; collaboration across networks and leading by influence; initiative and entrepreneurialism; accessing and analyzing information; curiosity and imagination. Thus, in view of the need

to equip learners with these basic needs, the role of the teacher and the learner need to be redefined.

Bakken et al. (2017) argue that teachers need to move from primarily being the information keeper and dispenser to be an orchestrator of learning where knowledge is co-constructed with the student. Teachers are expected to be guides, facilitators, mentors, sources and resources who make use of spontaneous teachable moments to scaffold children's learning. In addition, schools will need to create a "culture of inquiry" that is shared equally by teachers and students. In so doing, new knowledge will be generated as opposed to information delivery. In cognizance of the importance of laying the background of critical thinking and creativity among children, several countries have retrained the teachers and revised their curricula.

In United Kingdom, the department of education has revised early years framework to encourage educators to spend more time interacting with children to promote creative and critical thinking skills and early language and communication. The new framework advocates children active engagement in exploring, investigating and thinking about problems (Greenberg, 2014). The Australia Early Years Learning Framework views children as decision makers and active participants capable of constructing their own understandings. Therefore, educators are expected to be responsive to children's ideas and play and extend children's learning via open ended questioning, guiding their learning challenging their thinking and providing feedback. Teachers are also required to use play as a supportive environment where children can ask questions, solve problems and engage in critical thinking. Additionally, educators use strategies such as open questioning,

modelling, shared thinking and problem solving, and speculating as they engage children's thinking and learning and foster higher-level thinking skills.

In the United States of America (USA), the Common Core State Standards have been introduced to establish clear and consistent guidelines for what every student should know and be able to do in math and English language arts from kindergarten through 12th grade (K-12) (USA Department of Education, 2014). Development of the Common Core Standards considers the desired goals for college and career readiness with a focus on 21st Century higher order critical-thinking, reasoning, problem-solving and analytical skills that students need to be successful in school and beyond. To create aligned standards for each grade level, the established goals have been back-mapped downwards resulting to K-12 curriculum in which each grade level aims at accomplishing the same set of goals and prepares students for the next grade's corresponding goals.

Visual art is an activity that can greatly enhance children psychomotor and creativity performance but that requires an appropriate teacher's guidance. Omatseye and Emeriewen (2010) posit that Art is one of many languages' children feel very comfortable in expressing their ideas and feelings. Art activities are basically outlets for these young ones. The sensory experience of playing with art materials like clay, paints, crayons, water and sand give them a lot of thrill and satisfaction as they express their feelings. As children get older, they can express their ideas and feelings through art media like sculpting, painting and drawing.

Salamatu et al. (2017), however, emphasizes that, the way the Pre Primary 2 teacher responds to the child's work of art has great implications in the development of the child's self-concept. In other words, the creativity in the child can only be sustained if they are

encouraged, and if their imaginations are accepted. On the other hand, where the teacher hands down restrictions and controls the child's freedom to self-expression, there is the tendency to dampen the zeal to expand the curiosity. Hence the child's spark for creativity is thwarted. Ultimately, the child personality may be affected prompting a loss of confidence and sense of satisfaction (Omatseye & Emeriewen, 2010).

The foregoing discussion leads to the fact that the teachers' support to Pre-school learner is a key factor in the child ultimate performance in psychomotor and creative activities. As Tomlin (2008) aptly puts it, "creativity in young children can be nurtured – or it can be crushed". Thus, for a teacher to achieve the goals guiding learners in creative activities, the concern must be in both process and products of the activity (Omatseye & Emeriewen, 2010). Importantly too, children should be provided with appropriate and stimulating materials as well as right instructions. Such instruction should come by way of inspiration and encouragement.

In Kenya, a competence- based curriculum (CBC) in line with the demands of 21st Century was launched in 2017 (Nyakang'i, 2019). The CBC was designed to emphasize the significance of developing skills and knowledge and their application to real life situations. The curriculum clearly identified core competences to be acquired by the learners as they engage in activities in different learning areas. These core competences include critical thinking and problem solving, communication and collaboration, imagination and creativity, learning to learn and self-efficacy, citizenship, and digital literacy. CBC emphasized holistic development of the learner and which could be achieved by embracing the thematic integrated learning approach, ideal for teaching the Pre-school learners. The themes were derived from situations and things that learners are likely to

interact with in everyday life. Each theme is expected to cut across all the activity areas. Further, Pre-school teachers are expected to be flexible and accommodate an emerging situation as the learning theme for the period (Fundi, 2019; KICD, 2017).

It is evident from the foregoing review that a Pre-school teacher is expected to play the most critical part in molding the cherished critical thinker. However, while appreciating the envisaged gains from the Kenya CBC, several questions arise in regard to Pre-school education in Nzambani Sub County: To what extent have teachers' been able to assist their learners towards critical thinking in line with the CBC? To what extent has the teachers' and parental support influenced learners' performance in psychomotor and creative activities? Currently, there are a few studies being done in Kenya in regard to the implementation of CBC and in particular the extent to which the teachers' support enhances psychomotor and creative activities. The study endeavors to fill the identified lacuna.

2.2.3 Parental Support and Learners Performance in Psychomotor and Creative Activities

Some of the children's most important psychomotor and creativity development happens during their Pre-school years. By taking an active role in Pre-school education process, parents can help ensure that their children have the maximum support to develop to their full potential (Kupers, Lehmann-Wermser, McPherson & Geert, 2019). It is through parent involvement that teaching extends outside the classroom, creates a more positive experience for children and helps children perform better when they are in school. According to Taneri (2012), parents who keep abreast of what is happening in their child's Pre-school classroom, make a better connection between what is learned at school and what takes place in the home. This connection becomes a crucial component of a child's

development as it enhances creativity. Similarly, Glaveanu (2014) asserts that parental or family involvement does extend teaching outside the classroom as well as creating a more positive and conducive arena for psychomotor and creative activities. Thus, the proposed study considers the literature review in regard to parental support of the teacher-child activities geared to enhance psychomotor and creative activities as paramount.

Welch and McPherson (2012) emphasize that the capacity to imagine and create new, unique solutions to complex problems is a distinctive human trait that is integral to our human design. As such, the increasingly complex world issues demand people who are proactive and creative as they seek solutions for themselves and the society (Thurlings, Evers, & Vermeulen, 2015). Consequently, the importance of creativity is now widely recognized within education as an essential 21st-century skill (Donovan, Green, & Mason, 2014; Rotherham & Willingham, 2010).

Forming an understanding of children's creativity is fundamental for educational authorities, teachers, parents, and other stakeholders who wish to offer optimal conditions for its development (Kupers, Lehmann-Wermser, McPherson & Geert, 2019). Taneri (2012) is however, averse that most of the people think that creativity is related solely or mainly artistic or musical talent. For instance, in a study conducted by Taneri (2012), most of the parents believed that creativity is peculiar to the genius, artistic, and talented people. However, there are other studies that show that every child has creative potential and capable of creative expression implying that given the necessary support the creative aspect in every child can be stirred (Craft, 2010; Lara & Saracostti, 2019; Ward, 2014).

Taneri (2012) investigated Roles of parents in enhancing children's creative thinking skills in Ankara, Turkey. The study aimed at establishing the parents' opinions

about the creative thinking skills; succinctly delineate the meaning of creative thinking to parents, and to avail to parents' various ways of enriching home environment geared to enhance psychomotor and creative thinking skills. Using a pretest- posttest experimental design, views from 40 (grade one pupils) parents in the experimental group, and 40 (grade one pupils) parents in the control group was gathered through an open-ended questionnaire.

As an intervention measure, the experimental group was subjected to a 10-hour education seminar. The pretest results indicated that both groups knowledge level in regard to creative thinking had no difference. Conversely, the posttest results showed that the knowledge levels of parents in the experimental group who were given 10-hour parent education seminar were increased while the knowledge levels of the parents who were not given any education in the control group, remained the same. Besides, experimental group parents were equipped with more information about enriching their home environments to enhance psychomotor skills and creativity. However, Taneri (2012) study did not measure the influence of parents' knowledge skills intervention on pupils' performance in psychomotor and creative activities. This implied that the actual benefit of intervention program in enhancing children psychomotor skills and creativity could not be ascertained. The study aimed at not only establishing the parents' opinion and level of support to the Pre-school children's psychomotor skills and creativity but also its influence on the actual pupils' performance in these activities.

In a desk top research, Phu (2019) discusses theoretical issues related to fostering creativity, developing creativity via children's play, arts education, and roles of parents in enhancing their children's creative thinking skills. Additionally, the family background influence on children's creativity has been captured. The study findings affirms that the

development of imaginative play makes its peak during the Pre-school years (between ages 5 to 7) and identifies the parents' crucial role in nurturing creativity for their children. Phu research paper further acknowledges that creative thinking skills are not inherent characteristics since through conducive and appropriate environment; they can be taught and developed. According to Loveless (2002) cited in Phu (2009), creative thinking requires people to view issues from new perspectives and to put notions, information, and principles together in novel and innovative ways.

Moreover, Phu's (2019) research paper also identified art education and play as one of the means to develop children's creativity both at home and in school. Art education and play can lead to development of a unique set of thinking skills such as inquiring, problem solving, criticizing, and analyzing skills (Taneri, 2012). Kupers et al. (2019) consider Art as the use of imagination to express feelings or ideas, particularly in drawing, sculpting or painting. Arts include the fine and performing arts-painting, singing, acting, dancing, writing poetry, sculpting, playing an instrument, film making and creating mixed media productions. Each of these arts activities engages the learner wholly – socially, intellectually, physically, and emotionally.

Review of several research studies culminates in conclusions and recommendations of how parents in collaboration with Pre-school teachers can enhance children's psychomotor and creative activities performance (Phu, 2019). The study recommends that parents should help their child by reducing screen time to no more than two hours per day and that their child gets a minimum of one hour of physical exercise every day. Parents can also encourage play by providing interesting and mind-boggling materials that promote learning and exploration. Parents were encouraged to guide their child in teacher given

assignments, but they should avoid doing the assignment themselves. Moreover, children should be granted the freedom and autonomy to explore their ideas and do what they want.

They should be given the opportunity to express divergent thought and be encouraged to find several different routes to a solution, and more than one solution to a problem. However, Kupers et al. (2019) and Phu (2019) caution that parents and teachers should desist from rewarding children for exhibiting creativity. They argue that incentives interfere with the creative process, reducing the quality of children responses and the flexibility of their thought. Thus, children should be allowed to develop mastery of creative activities that they are intrinsically motivated to do, rather than trying to motivate them with rewards and incentives.

In a study titled ‘how Pre-school craft projects kill children’s creativity’, Meyers (2018) examines the various ways Pre-school craft projects stifle kids’ creativity. Meyers (2009) argues that although Early Childhood Education experts insist that the process matters most in art, and not the product, most of the teachers are concerned about Pre-school craft projects product. When teachers dictate what the learners should make and how they should make it, youngsters are no longer in control of their artistic vision. In such a scenario, all children’s projects wind up looking the same and unfortunately, the finished product is too often considered more important than the process of getting there. Meyers (2018) emphasizes the need for the adults to act as facilitators of the experience, and not as instigators regarding Pre-school art. Children should not always be directed on when, what, or how to create. Adults should provide the space, materials, and the opportunities and then stand back, as the kids exercise their creative power.

Wyver et al. (2019) observes that despite the research -based benefits arising from fine and performing arts such as painting, singing, acting, dancing, writing poetry, and sculpting, most parents and teachers fail to offer the expected support citing lack of stable career after school. Children have therefore, been routinely drilled to pass exams in the hope of securing some conventional jobs in future. As Ward (2014) observes, this routine kill creativity and incapacitates people from dealing with novel challenges at personal, community to global level. According to Greenberg (2014), the 21st Century challenges such as the current elusive corona virus pandemic call for a paradigm shift in education where critical thinking is advocated for as opposed to regurgitation of the established facts.

The place for art as a way of enhancing children psychomotor skills and creativity in most African countries is way behind the practice in advanced countries (Salamatu et al. 2017). A study by Chepindyo (2014) established that most parents in Lang'ata Nairobi County perceive people who are inclined in fine and performing arts as social misfits. According to Chepindyo, (2014), the parents negative perception was exacerbated by the fact that most of the artist adorned the 'Rasta hair style' mostly associated with bhang smokers in the area. In view of such perceptions, parents and teachers are likely to offer lopsided support to children who exhibit keen interest in artwork. The proposed study aims at the extent to which parents support the teachers' effort in enhancing children psychomotor skills and creativity in Nzambani Sub County, Kitui County.

2.4 Summary of Literature Review and Research Gaps

The foregoing literature review has established that although there exists a plethora of studies (Alkus & Olgan, 2014; Costa et al. 2015; Dere, 2019; Garibotti et al. 2013; Gil-madrona et al. 2018; Glaveanu, 2014; Jing Hua et al. 2016) that focus on Pre-school

psychomotor and creative activities worldwide, there is paucity of such studies in Africa and in particular Kenya. The few reviewed studies in Kenya showed that apart from children spontaneous play, other forms of creativity such as fine and performing arts are only remotely established in most Pre-schools in Kenya. However, the new Kenya CBC launched in 2017, identified critical thinking and problem solving, creativity and imagination as some of the core competencies. To actualize these core competencies, psychomotor and creative activities were identified as the key media with an allocation of the highest proportion of time (32%) that is Monday to Friday. However, this has not been fully attained through the current CBC.

Most of the studies reviewed have mostly investigated the influence of home environment on children prowess in psychomotor skills and creativity and thus missing the possible key findings about the influence of school environment where the child spends most of the time, teachers' support and parents' support. The study therefore was a comprehensive examination of the influence of pre-school teachers and parental support under the prevailing environment on the Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub-county, Kitui County.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter delineates the research methodology that was adopted by the researcher in the collection, analysis and interpretation of data. The chapter presents the research design, the study locale, target population, sample size and sampling techniques. It also covers the description data collection instruments, pilot study, validity and reliability of the research instruments, data analysis procedures. The chapter culminates with a description of ethical and legal considerations.

3.2 Research Design

The study adopted cross sectional survey research design. Creswell (2014) regards research design as the scheme, outline or plan that is used to generate answers to research problem. Orodho (2012) explicates that, in a cross -sectional survey, data is collected at one point from a sample selected to describe some large population at that time. Such survey can be used not only for purposes of description but also for determination of relationships between variables at that time of study (Sahu, 2013). The design was appropriate since the researcher aimed at collecting information on the extent to which the school environment, pre-school teachers and parental support influence the learners' performance in psychomotor and creative activities as at the time of research in Nzambani sub-county, Kitui County. Again, the choice of this research design is dictated by its effectiveness to secure evidence concerning all the existing conditions. Thus, the design was appropriate for obtaining, recording and reporting conditions as they existed.

3.3 Research Site

The study was conducted in Nzambani Sub-County, Kitui County. According to Kenya National Bureau of Statistics (KNBS, 2018), most of Nzambani Sub County is classified as semi-arid ranching area where most of the inhabitants travel far and wide as they engage in daily economic activities. According to the report from Nzambani Sub County Education Office (2019), there were 47 public and 8 private pre-schools. However, from the reviewed studies there was limited information on determinants of pre-school learners' performance in psychomotor and creative activities in Nzambani Sub County. Additionally, according to Kitui County schools census report (MOE, 2018), most pre-schools gave conflicting information about the implementation of CBC and in particular psychomotor and creative activities. To that end, the site was identified as appropriate for the study.

3.4 Target Population

A target population refers to a universal set of all elements in which the characteristics under consideration are present; a population is a homogeneous congregation (Babbie, 2014). According to the Nzambani Sub County Education Office (2019), there were 153 pre-school teachers and 1620 learners from 55 pre-schools. Therefore, the study targeted all the 153 pre-school teachers, 1620 pre-school learners and 55 head teachers from 55 pre-schools.

3.5 Sample and Sampling Techniques

Kombo and Tromp (2006), define a sample as a set of respondents picked from a bigger population for the purpose of a survey. The sample size of pre-school teachers was

obtained using Yamane (1967) formula of sample size with an error of 5 % and confidence level of 95 %. The calculation is as follows:

$$n = \frac{N}{1 + N (e^2)}$$

Where n = the sample size

N = population of pre-school teachers (153)

e = the level of precision or the sampling error (0.05)

$$n = 153 / (1 + 153 \times 0.05 \times 0.05)$$

$$n = 110.66$$

$$n = 110$$

Using simple random sampling technique, two teachers was selected from each of the 55 pre-schools in Nzambani Sub County. Gay, Mills and Airasian (2009) posit that for a small sample, a sample size of 10% to 30% of the population is sufficient for reliable findings. Additionally, Babbie (2014) emphasizes that unlike the use of questionnaires, interview method of data collection requires a relatively smaller number of respondents. Therefore, the study sampled 30% of head teachers to get 17 head teachers slated for interview schedules. Since the learners were assessed collectively, all the 1620 pre-school learners in all the 55 pre-schools in Nzambani Sub County were considered for the study. Thus, the total sampling matrix gave 1747 respondents comprising of 17 head teachers, 110 pre-school teachers, and 1620 pre-school learners. Table 3.1 shows the sample size distribution.

Table 3.1: Sample Size distribution

Category of Respondents	Population	Sample	Proportion %
Head teachers	55	17	30.0
Pre-school teachers	153	110	72.0
Pre-school learners	1620	1620	100.0
Total	1828	1747	95.6 %

3.6 Data Collection Measures

This study employed the pre-school teachers' questionnaires, head teachers' interview schedule and pre-school creative activity observation schedule.

3.6.1 Pre Pre-school Teachers' Questionnaire

The Pre-school teachers' questionnaire was semi-structured in which respondents were allowed to express their views in their own words in the open -ended questions while closed ended questions captured factual responses. It was divided into sections A, B, C and D (refer to Appendix II). Section A captured the teacher's demographic information, section B gathered information regarding the school environment, section C solicited information on the level of teachers' educational qualification while section D aims at gathering information on the extent of parental support.

3.6.2 Head Teachers' Interview Schedule

In order to get an in-depth information on the school environment, pre-school teachers and parental support on pre-school learners' performance on psychomotor and creative materials, the head teachers' interview guide was used. According to Fraenkel, Wallen and Hyun (2012), interview method of collecting data is normally superior to other

instruments since it creates rapport between the respondent and the researcher. In addition, it guards against confusing the questions since the interviewer can clarify the questions thereby helping the respondent give relevant responses. The respondents were given adequate time to respond to the questions. The interview guide gathered information in accordance to the study's three objectives which was done by writing and recording under the respondents' consent. The recorded information facilitated further analysis of the data by providing an in-depth information.

3.6.3 Pre-school Psychomotor and Creative Activities Observation Schedule

Kombo and Tromp (2006) explicate that observation procedure has the advantage of recording naturally occurring behavior and thus avoiding some of the disadvantages associated with the questionnaires and interview guides. The researcher used the pre-school learners' psychomotor and creative activities observation schedule to rate the level to which learners excelled in different psychomotor and creative activities. Some of these activities were modelling, drawing, reciting poems, coloring, dancing among others. The researcher paid a direct observation to the pre-school learners as they engaged in different creative tasks and rated them in different levels ranging from poor to excellent.

3.7 Pilot Testing of Research Instruments

Creswell (2014) observes that it is vital for a researcher to test tools before using them to ensure their validity, reliability and practicability. Therefore, piloting was done in order to ascertain the credibility of the tools by testing clarity of language, time taken to respond, procedure of administering, length and layout of tools. The pilot group was 10% of the sample size. According to Sahu (2013), it is prudent to use 10% of the study's sample size when conducting a pilot test. Ten percent of 55 pre-schools gave 6 schools. Thus, the

study involved 6 head teachers, 12 Pre-school teachers and Pre-school learners from the 6 Pre-schools chosen at random from the neighboring Mutitu Sub County. The participants were encouraged make comments and suggestions which were used to improve the questionnaires and interview guides. The pilot study enhanced validity and reliability of the data collection instruments.

3.8 Validity of the Data Collection Instruments

Validity refers to the correctness, meaningfulness of inferences and soundness of outcomes of conclusion, which are based on the research findings (Kothari, 2014; Saunders, Lewis & Thornhill, 2012). The researcher sought the expert opinion on content validity. The data collection instruments were availed to the University supervisors assigned to the researcher for review. The comments derived from them were used to improve the data collection instruments before the actual data collection.

3.9 Reliability of the Data Collection Instruments

Reliability is the degree to which a research instrument can give same or consistent and valid results or data after repeated trials (Kombo & Tromp, 2006). When a research instrument meets the criteria then it is said to be reliable. It can be used from time to time and give similar outcome irrespective of the environmental set up. The test-retest method was used to estimate the reliability of quantitative data collected from the Pre-school teachers' questionnaire. The same questionnaire was administered to the same teachers in a span of two weeks. The data from the two sets of questionnaires were correlated using Pearson Product Moments' correlation method and a coefficient of 0.84 was obtained. According to Babbie (2014), a reliability coefficient of 0.7 and above is considered enough for a research instrument in social sciences.

3.9 Data Processing and Analysis

Data analysis is the process of bringing order and the meaning of information collected (Kombo & Tromp, 2006). The collected raw data was edited to detect errors and omissions. The completed questionnaires were then scrutinized to ensure that the data was accurate and consistent with other facts gathered and organized well to facilitate coding and tabulation. To facilitate the analysis, the Statistical Package for Social Sciences (SPSS) version 22 data analysis software was used. The data collected was analyzed with respect of the research objectives using both descriptive and inferential techniques. Descriptive statistics such as percentages, means and standard deviation were used while the three formulated null hypotheses were tested by use of multiple regression analysis. The regression equation was in the form: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$ and where y = Pre-school learners' performance in psychomotor and creative activities, X_1 = school environment, X_2 = Pre-school teachers' support, X_3 = parental support while ε is the error term. Qualitative data generated from the head teacher's questionnaire and open ended sections of teachers' questionnaire were put into broad themes and reported in accordance to the study objectives. Some data were reported verbatim and used to augment the quantitative data. The tape recorded data was used for validation and triangulation of the quantitative data. Again the purposes of the recorded information were to allow for further analysis of the data by providing in depth information. To maintain anonymity, identification labels such as H1, H2, and H3 were used to identify head teachers.

3.10 Legal and Ethical Considerations

Legal and ethical considerations form a key part in research since it helps to ensure that no one suffers harm or undesirable consequences as a result of the research activities.

Due to the normally sensitive relationships between the researcher and the respondents, reasonable safeguards were built during the field work study based on appropriate ethical requirements and measures. The researcher got a letter of introduction from Africa Nazarene University. The letter assisted the researcher to secure a research permit from National Council of Science, Technology, and Innovation (NACOSTI).

A preliminary visit was made to schools to inform the head teachers of the intended research. A date to administer the tools was arranged during these visits. In order to avoid suspicion and scepticism, the researcher assured the respondents of utmost confidentiality and that the information provided would be used for academic purposes only. Furthermore, while collecting data the researcher acknowledged all the sources of information collected from textbooks and other research materials.

CHAPTER FOUR

RESULTS AND ANALYSIS

4.1 Introduction

This chapter presents the results and analysis of the data collected in this study. The purpose of the study was to examine the determinants of pre-school learners' performance in psychomotor and creative activities in Nzambani sub-county, Kitui county, Kenya. The study objectives were to assess the influence of school environment on Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub-County, Kitui County, to examine the influence of Pre-school teachers' support on learners' performance in psychomotor and creative activities in Nzambani Sub-County, Kitui County, and to establish the influence of parental support on Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub-County, Kitui County. The null hypotheses of the study were tested using multiple regression analysis at a significance level of 0.05. Qualitative data from interviews were analyzed concurrently with the quantitative data.

4.2 Response Rates

The study targeted 55 head teachers, 153 Pre-school teachers and 1620 pre-school learners from 55 Pre-schools in the Sub County. The study sampled 17 head teachers, 110 pre-school teachers and 1620 pre-school learners through census and simple random sampling. All pre-school teachers filled out and returned the questionnaires while 13 head teachers were available for the interview. Fraenkel et al. (2012), postulate that a response rate of more than 60 per cent is normally enough for a study. Thus, the return rate was 100% for pre-school teachers and 81.3% for head teachers. Hence, enough for the study.

4.3 Demographic Information

This section entails the general information of the respondents. The aspects captured included; gender of the respondents, level of education and teaching experience for the pre-school teacher respondents.

4.3.1 Gender of the Respondent

The study sought to establish the gender distribution of respondents. The distribution is depicted in Table 4.1.

Table 4.1: Distribution of Respondents by Gender

Gender/ Category	Male	Female	Total
Pre-school teachers	40(37.0 %)	70(63.0 %)	110
Head teachers	10(59.0 %)	7(41.0 %)	17
Total	50 (39.4 %)	77(60.6 %)	127

It was evident from Table 4.1 that most of the pre-school teachers were female (63.0 %) while most of the head teachers were male (59.0 %).

4.3.2 Pre-school teacher's teaching experience

The study sought to find out the experience of pre-school teacher respondents. This was important because experienced pre-school teachers were better informed on education matters and specifically pupils' behavior and express their feelings after schools ranking Figure 4.1 depicts the pre-school teachers and head teacher's teaching experience.

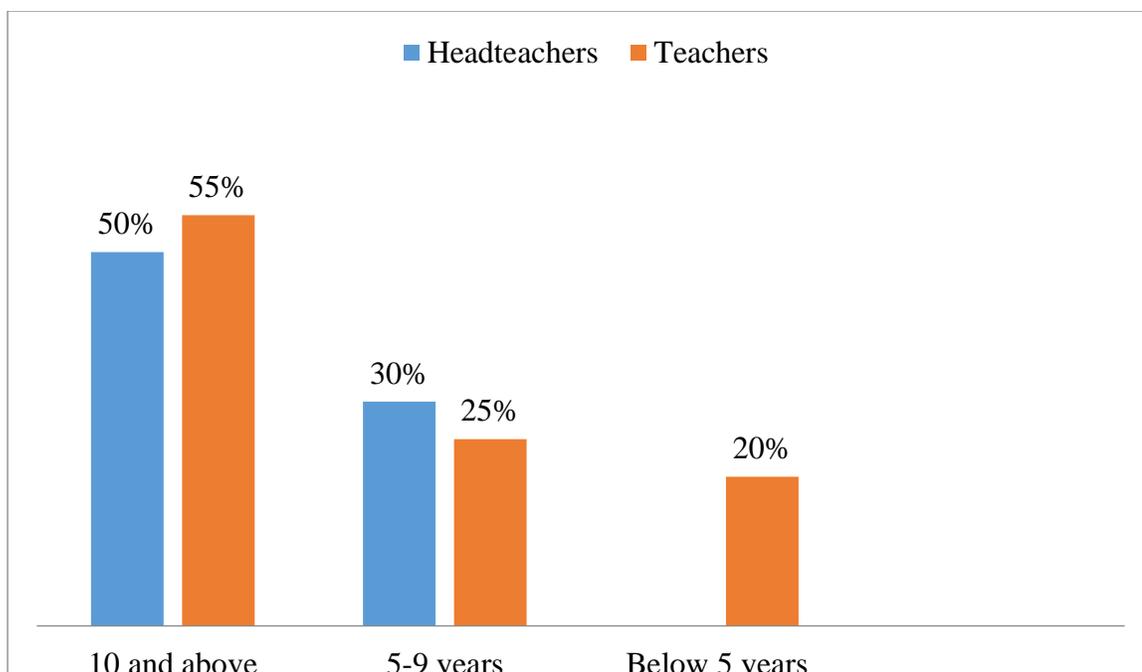


Figure 4.1: Teaching Experience

Figure 4.1 show that 50% of head teachers and 55% of pre-school teachers had over 10 years of experience while 30% of head teachers and 25% of pre-school teachers had an experience of 5 to 9 years. However while there was no head teacher who had an experience below 5 years, there were 20% of pre-school teachers who had. This implied that most of the head teachers and pre-school teachers had witnessed school national ranking over several years before the ban was imposed. However, ranking at County and Sub County level had been in practice. Since perception is formed gradually, the sampled respondents happened to be the most appropriate for the study.

4.3.3 Pre-school Teachers Level of Education

The study sought to find out the level of education of pre-school teacher respondents. This was important because well trained teachers were better informed on psychomotor and creative activities and specifically pupils' behavior and express their feelings. Figure 4.2 depicts the pre-school teachers and head teachers' level of education

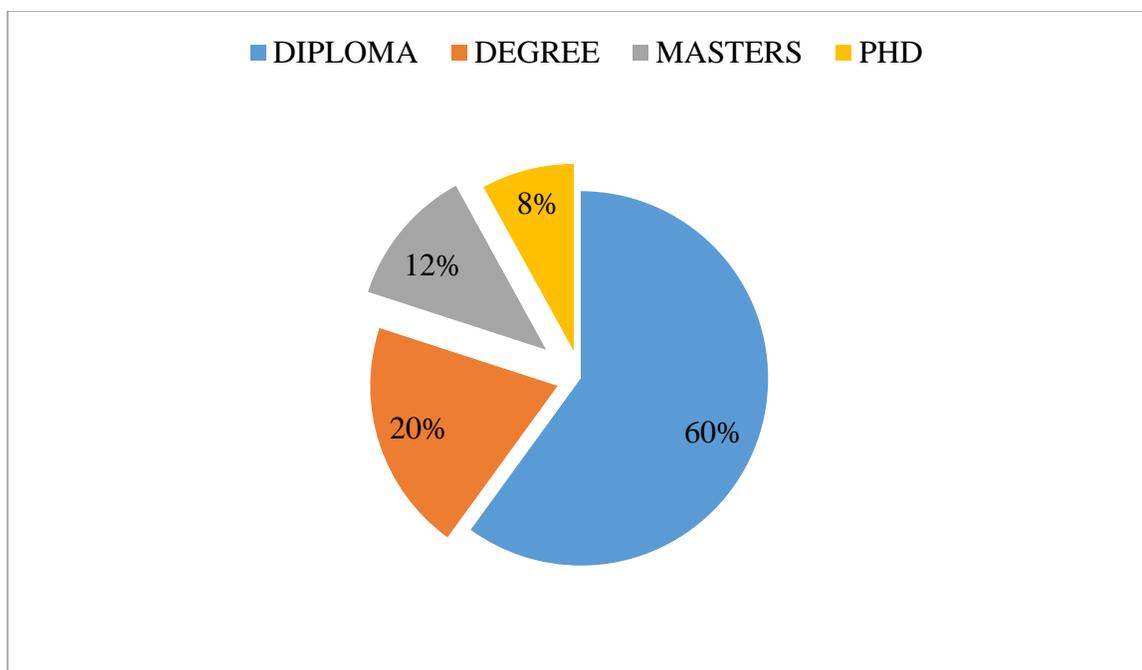


Figure 4.2: Pre-school Teacher's Level of Education

This shows the level of training of pre-school teachers in Nzambani Sub County, Kitui County which had 110 Pre-school teachers. The levels of education considered were diploma, which had a majority at 60% (66) of the respondents, degree had 20% (22) teachers 12% (13) were master's degree holders and 8% (9) had their doctorate degrees as shown in Figure 4.2.

4.4 Influence of School Environment on Pre-school Learner's Performance in Psychomotor and Creative Activities

The first objective of this study was to identify the influence of school environment on Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub County, Kitui County. To answer this objective, the pre-school teachers were given statements and asked to indicate their extent of agreement or disagreement. The statements were in form of a Likert scale in which strongly disagree was rated number 1 while strongly

agreed was rated number 5. The mean responses were such that: 1 to 2.8 was considered as 'Disagree', 2.9 to 3.1 was considered as 'Undecided', 3.2 to 5 was considered as 'Agree'.

Table 4.2 presents a summary of the responses obtained.

Table 4.2: Influence of School Environment on Psychomotor and Creative Activities

Statement	Mean	SD
My school has instructional materials for psychomotor and creative activities	3.3	0.9
Audio visual resources are an integral part for psychomotor and creative activities in our institution	3.2	0.4
Instructional space has been provided for psychomotor and creative activities within the school.	2.2	0.8
My school has most of essential psychomotor activities such as sewing, throwing a ball and typing, and creative activities materials as per the syllabus requirement.	4.2	0.5
The available psychomotor and creative activities materials are adequate for the all pre-school learners.	2.4	0.6
We have adequate space for indoor play and other activities.	2.7	1.0
We have adequate space for outdoor play and other activities.	2.2	0.8
Our space for outdoor activities is safe for pre-school children.	2.3	0.5
The ECDE class has a funds allocation for psychomotor and creative activities materials.	2.8	1.2
There are adequate storage facilities for psychomotor and creative materials	2.9	1.1
My head teacher is very committed in acquisition of psychomotor and creative activities materials.	3.9	0.7
We observe safety when having psychomotor and creative activities with learners.	3.4	0.8

n = 110

As shown in Table 4.2, most of the pre-schools had instructional materials for psychomotor and creative activities (Mean=3.3, SD=0.9). Additionally, audio visual resources are an integral part for psychomotor and creative activities in the schools (Mean=3.2, SD=0.4). In terms of instructional space, it is evident that majority disagreed that instructional space had been provided for psychomotor and creative activities within the pre-schools (Mean=2.2, SD=0.8).

Majority of the respondents were positive that their school had most of essential psychomotor activities such as sewing, throwing a ball and typing, and creative activities materials as per the syllabus requirement (Mean=4.2, SD=0.5). However, it was disagreed that the available psychomotor and creative activity materials were adequate for the all Pre-school learners (Mean=2.4, SD=0.6). It was also disagreed among the teachers that there was adequate space for indoor play and other activities (Mean=2.7, SD=1.0). In terms of outdoor space, majority of the pre-school teachers disagreed with the statement that there was adequate space for outdoor play and other activities (Mean=2.2, SD=0.8). Additionally, pre-school teachers further disagreed to the statement that the space for outdoor activities was safe for Pre-school children (Mean=2.3, SD=0.5).

Regarding funds allocation, pre-school teachers disagreed with the statement that the ECDE class had funds allocation for psychomotor and creative activities materials (Mean=2.8, SD=1.2). On the question of storage facilities, it was found that there were no adequate storage facilities for psychomotor and creative materials (Mean=2.9, SD=1.1). It was also established that the head teachers were determined in the acquisition of psychomotor and creative activities materials (Mean=3.9, SD=0.7). Regarding to safety,

the study found that the pre-school teachers observe safety during the psychomotor and creative activities with learners (Mean=3.4, SD=0.8).

4.5 Influence of Pre-school Teachers' Support on pre-school learners' Performance in Psychomotor and Creative Activities

The second objective of the study sought to examine the influence of Pre-school teachers' support on learners' performance in psychomotor and creative activities in Nzambani Sub-County, Kitui County. To achieve the objective, the study analyzed quantitative data from pre-school teachers' questionnaire and the head teachers' interview schedule. The pre-school teachers' questionnaire had a set of statements in form of a Likert scale in which strongly disagree was rated number 1 while strongly agree was rated number 5. The mean responses were such that: 1 to 2.8 was considered as 'Disagree', 2.9 to 3.1 was considered as 'Undecided', 3.2 to 5 was considered as 'Agree'. The analyzed data was summarized in means and standard deviations as depicted in Table 4.3.

Table 4.3: Pre-school teachers' support and learners' performance

Statement	Mean	SD
I have sufficient knowledge on psychomotor and creative activities	2.8	0,9
We do psychomotor and creative activities right from pre-school	4.0	0.8
Pupils are guided on the importance of psychomotor and creative activities as they progress in their careers	3.8	0.7
Pupils are given ample time to to choose and engage in psychomotor and creative activities of their choice	2.8	1.2
Most of the pupils demonstrate commitment in psychomotor and creative activities	3.2	0.4
We advice pupils on different psychomotor and creative activities	2.7	1.1
Most of pre-school pupils are definite of psychomotor and creative activities	2.8	0.5
We assist pupils to set targets in psychomotor and creative activities	3.3	0.9
Most of the pupils are keen to consult on psychomotor and creative activities as it has a bearing on KCPE performance	3.9	0.6

n = 110

In reference to Table 4.3, the findings showed that pre-school teachers lack enough knowledge to guide pupils on psychomotor and creative activities (Mean=2.8, SD 0.9) because most of the teachers lack training on the psychomotor and creative activities. They do not know what to advise a pupil who would like to get information about a certain psychomotor and creative activities. In response to the statement that most pre-school teachers conduct psychomotor and creative activities to pupils' right from pre-school shows that most schools do it (Mean=4.0, SD 0.8). This implies that whenever pupils are

introduced in pre-school, they are made to understand that the psychomotor and creative activities are part and parcel of activities that shape their future careers. Pre-school teachers guide pupils on psychomotor and creative activities as they choose their preferred activities (Mean=3.8, SD 0.7). As pupils get ready to choose the psychomotor and creative activities they would wish to involve themselves with, the teachers work hard in helping them understand the psychomotor and creative activities requirement. The researcher realized that the findings were corresponding to those of other researchers done earlier based on the responses given by the pre-school teachers.

One of the school head teachers had similar argument as exemplified by the following comment:

In my previous stint as a teacher, I noted that if pupils select their psychomotor and creative activities well while in pre-school, they get the motivation to want to perform better even academically and as a result they perform well academically as the activities act as a motivator or catalyst to good performance. In addition, I support the teachers by having them have ample time with the pupils engaging in psychomotor and creative activities so that they can be able to deliver as much information and activities to the pupils as possible. I also allow the teachers to engage external sources for more information on these creative activities so that they deliver more information to the pupils and the school facilitates for that. Pupils are encouraged on making varied choices on matters psychomotor and creative activities. (Head Teacher 5, 2020)

Majority of the teachers suggest that pupils are not given ample time to engage in psychomotor and creative activities (Mean= 2.8, SD=1.2). It shows that pupils are not given enough time so that they can conduct their research and come up with a conclusion of what they would like to select depending with the psychomotor and creative activities availed before them. There was manifestation of a high deviation meaning some pre-school teachers though most teachers did not give ample time to pupils, others did it and pupils in their schools were able to consult well and widely engage on different psychomotor

activities available. However, a relatively high standard deviation is an indicator of a great variation in teacher's response. Majority of the teachers agreed that most pupils demonstrate commitment to excel psychomotor and creative activities (Mean 3.2, SD 0.4). This is because at least enrolling in preprimary; most pupils are aware of the psychomotor and creative activities. Moreover, teachers entice them more on psychomotor and creative activities as they continue learning as indicated by the low deviation.

There were further responses on the same subject from the head teacher's schedule, that:

Psychomotor and creative activities caters for pupils' career issues through ensuring that teachers in the school are involved in engaging pupils mostly at the three basic levels of pre schooling on the importance of psychomotor and creative activities. This steps include; when a pupil is being admitted to the school. It is also done when the pupils are undertaking their subjects. I ensure that the pre-schoolteachers undergo an in service training on the career issues affecting pupils. In addition to that, the school also sought for external help through the extracurricular department to make psychomotor and creative activities very powerful for pupils. (Head Teacher 3, 2020)

Most pre-school teachers do not advise pupils on the psychomotor and creative activities (Mean= 2.7 SD=1.1). It shows that most teachers do not find it important in advising pupils the importance and urgency of engaging in psychomotor and creative activities. The findings show that most of the preschool pupils are not definite on the psychomotor and creative activities they would like to engage in (Mean= 2.8, SD = 0.5). This is because psychomotor and creative activities sessions are not conducted in a way that the pupils are made to get aware of exactly the details and other relevance of the activities to them. Most preschool pupils do not have knowledge on what they are best at even. They just engage in psychomotor and creative activities for the sake of engaging without a clear career in mind since they lack teachers' intervention and guidance on the same. In addition to this response, one of the head teachers reported that:

Psychomotor and creative activities help pupils get awareness about the various requirements for different career opportunities. They therefore work hard in psychomotor and creative activities related to the careers they would want to pursue. The pupils are made aware of what they are supposed to do to avoid putting unnecessary effort in some psychomotor and creative activities that are not contributing to their line of interest. In so doing, the teachers are able to increase the pupils' intrinsic motivation and as a result, pupils work extremely hard. Even in situations which some psychomotor and creative activities are interested in are difficult, they are able to get help individually because they have a positive attitude towards the subjects and learning in general. (Head Teacher 4, 2020)

According to the statement that teachers assist pupils to set the psychomotor and creative activities targets in line with the higher education prospects and career requirement (Mean= 3.3, SD= 0.9). Most schools have organized a system whereby pupils have to be assisted while setting their targets for psychomotor and creative activities. This is because schools would wish to use the pupils' achievements in psychomotor and creative activities as an improvement point for the school's general performance. Therefore pre-school teachers are urged to try their level best in ensuring that this is done the best way possible. Most teachers agreed that most pupils are always keen on psychomotor and creative activities requirements (Mean= 3.9, SD= 0.6). Pre-school teachers get a large number of pupils who through their will consult them on the career requirements so that they prioritize on what to do on matters of psychomotor and creative activities.

However, one of the head teachers honestly confessed that he had never paid much attention to the current job market dynamics through this statement:

The psychomotor and creative activities staff in my school has been helping pupils on issues concerning the psychomotor and creative activities. It is a matter of fact that if a pupil has been able to determine the psychomotor and creative activities to engage in, that will be crucial to their career and general wellbeing in their future. However, I have not been keen on psychomotor and creative activities in the current job market. This has been an insight on my side since as technologies are advancing, pupils are supposed to advance as well. They ought to be notified on the

psychomotor and creative activities which are fading in the job market so that they are advised on selecting psychomotor and creative activities which will eventually get them a brighter future if blended with their educational qualification. Since I have not researched on the new psychomotor and creative activities for the today's job market, with help of my creative department, I will get a way out for my pupils to know what is practical and reasonable for them. (Head Teacher 1)

4.6 The Influence of Parental support on Learners' Performance in Psychomotor and Creative Activities

The third objective of the study was to examine the influence of parental support on pre-school learners' performance in psychomotor and creative activities in Nzambani Sub-County, Kitui County Kenya. To achieve the objective, the study analyzed the quantitative data from teachers' questionnaire and the head teachers' interview schedule. The pre-school teachers' questionnaire had a set of statements in form of a Likert scale in which strongly disagree was rated number 1 while strongly agree was rated number 5. The mean responses were such that: 1 to 2.8 was considered as 'Disagree', 2.9 to 3.1 was considered as 'Undecided', 3.2 to 5 was considered as 'Agree'. The analyzed data was summarized in means and standard deviations as depicted in Table 4.4.

Table 4.4: Teachers' Response on Parental Support of Pre-school Learners and their Performance

Statement	Mean	SD
Parents cooperate with teachers in assessing the child progress in tasks that require fine motor and gross motor skills at home	3.4	1.3
Most of the parents are aware of their expected support as far as psychomotor and creative activities are concerned	2.7	0.8
Parents are normally receptive and participate actively in learners assignments	3.2	0.5
Parents provide creative materials at home and at school	2.8	1.1
Parents assist their children in accomplishing home work	3.5	0.5
Parents assist in assessment and monitoring of learners progress	2.8	1.3
Parents are keen in attending class consultative meetings	3.4	0.6
Parents call/write messages to follow up on their child progress	2.2	0.8

n = 110

As evident from Table 4.4, teachers agreed that parents cooperate with teachers in assessing the child progress in tasks that require fine motor and gross motor skills at home ($M = 3.4$, $SD = 1.3$). However, the high standard deviation of 1.3 signifies that the response varied in that while some teachers were in agreement, some felt that parents were yet to give them maximum support in the child assessment. The statement that 'most of the parents are aware of their expected support as far as psychomotor and creative activities are concerned' was refuted by most of the teachers ($M = 2.7$, $SD = 0.8$). Nonetheless, teachers agreed that parents are normally receptive and participate actively in learners assignments ($M = 3.2$, $SD = 0.5$).

Most of the teachers disagreed that parents provide creative materials at home and at school ($M = 2.8, SD = 1.1$). However, the high standard deviation shows that the opinion was varied on this issue. Similarly, teachers disagreed that parents assist in assessment and monitoring of learners progress ($M = 2.8, SD = 1.3$). Further, most of the teachers agreed that parents assist their children in accomplishing home work ($M = 3.5, SD = 0.5$). Likewise parents were found to be keen in attending class consultative meetings ($M = 3.4, SD = 0.6$). Finally, teachers indicated that parents hardly call/write messages to follow up on their child progress ($M = 2.2, SD = 0.8$).

4.7 Hypotheses Testing

Through multiple regression analysis, the study aimed at ascertaining the magnitude of influence of each predictor (independent variables) and its significance influence on the Pre-school learners' performance in psychomotor and creative activities. Additionally, the study aimed at determining the extent to which the combined factors influence and correlate to the level of Pre-school learners' performance in psychomotor and creative activities. To achieve that, the mean response values for each independent variable were regressed against mean level of performance.

The regression model capturing the hypothesized relationship was given as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon, \text{ where;}$$

$Y = t$ Pre-school learners' performance in psychomotor and creative activities

$X_1 =$ school environment

$X_2 =$ Pre-school teachers' support

$X_3 =$ parental support

$\varepsilon =$ the error term.

Tables 4.5, 4.6 and 4.7 depict the summary of multiple regression analysis.

Table 4.5: Model Summary for the Multiple Linear Regression for all Variables

Model	R	R ²	Adjusted R ²	Standard error of the estimate
1	0.858	0.736	0.688	0.2307

Predictors: (constant), School environment, Pre-school teachers' support, and parental support

Dependent variable: Pre-school learners' performance in psychomotor and creative activities

As indicated in the Table 4.5, the coefficient of determination R square is 0.736 and R is .858 at 0.05 significance level. The coefficient of determination indicates that, 73.6% of the variation on Pre-school learners' performance in psychomotor and creative activities is influenced by the independent variables in this study. This implies that, there exists, a positive significant relationship between the studied variables and Pre-school learners' performance in psychomotor and creative activities.

Table 4.6: Multiple Regression Model Significance (ANOVA)

	Model	Sum of Squares	df*	Mean Square	F	Sig.
1	Regression	53.814	3	17.938	285.183	0.002
	Residual	6.664	106	0.0629		
	Total	60.478	109			

df*- degrees of freedom.

Table 4.6 shows that the joint independent variables statistically significantly predict the dependent variable, $F(3, 106) = 285.183$, $p < 0.05$ and thus, a confirmation that the regression model was a good fit for the data. Table 4.7 shows the summary of multiple regression model coefficients.

Table 4.7: Summary of Multiple Regression Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig. value
	Beta	Std. Error	Beta		
1 (Constant)	.344	0.173		3.26	0.139
School Environment	.309	0.141	0.282	3.54	0.009
Pre-school teachers' Support	.427	0.148	0.401	3.83	0.032
Parental Support	.588	0.163	0.529	5.39	0.017

Dependent variable: Pre-school learners' performance in psychomotor and creative activities

Table 4.6 reveals that Pre-school learners' performance in psychomotor and creative activities was a function of positive reinforcement of school environment, Pre-school teachers' support and parental support. The regression model capturing the hypothesized relationship was given as: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$ and where Y = Pre-school learners' performance in psychomotor and creative activities X_1 = School environment, X_2 = Pre-school teachers' support, X_3 = parental support, while ε is the error term. Assuming the error term ε to be zero and substituting the unstandardized coefficients β values, the estimated multiple regression equation becomes: $Y = 0.344 + 0.309 X_1 + 0.427 X_2 + 0.588 X_3$.

The β values indicate the individual contribution of each predictor to the model if the effects of all other predictors are held constant. Thus, when the school environment improves by one unit, the pre-school learners' performance in psychomotor and creative activities would increase by 0.309 units ($\beta = 0.309$) while holding the other factors constant. Similarly, when pre-school teachers' support increases positively by one unit,

pre-school learners' performance would increase by 0.309 units ($\beta = 0.309$) while holding the other factors constant and so on.

The four null hypotheses of the study were tested by considering the t statistic (Table 4.7) that tests whether a β value is significantly different from zero ($H_0: \beta = 0$). The hypotheses were tested at 95% confidence level.

***HO₁:** School environment has no statistically significant influence on Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub County, Kitui County.*

In reference to Table 4.7, the unstandardized beta value for school environment was found to be significantly greater than zero ($\beta = 0.309$, $t(109) = 3.54$, $p < 0.05$). Subsequently, the first null hypothesis was rejected. It was, therefore, deduced that school environment had statistically significant influence on Pre-school learners' performance in psychomotor and creative activities in public primary schools in Nzambani Sub County.

***HO₂:** Pre-school teachers' support has no statistically significant influence on Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub County, Kitui County.*

Table 4.7 shows that the unstandardized beta value for teachers' support of Pre-school learners was significantly greater than zero ($\beta = 0.427$, $t(109) = 3.83$, $p < 0.05$). Subsequently, the second null hypothesis was rejected. It was, therefore, deduced that teachers' support had a statistically significant influence on Pre-school learners' performance in psychomotor and creative activities in public primary schools in Nzambani Sub County.

***H₀₃**: Parental support has no statistically significant influence on Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub County, Kitui County.*

In reference to Table 4.7, the unstandardized beta value for parental support was significantly greater than zero ($\beta = 0.588, t(109) = 5.39, p < 0.05$). Thus, **H₀₃** was rejected, implying that parental support had a statistically significant influence on Pre-school learners' performance in psychomotor and creative activities in public primary schools in Nzambani Sub County.

CHAPTER FIVE

DISCUSSIONS, SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the discussion of the results as per research objectives, summary of findings, conclusion derived from the findings and the recommendations. Areas of further study are also suggested. The purpose of the study was to establish the determinants of pre-school learners' performance in psychomotor and creative activities in Nzambani Sub-County, Kitui County, Kenya. Moreover, the study sought to identify the influence of school environment, Pre-school teachers' support, and parental support on Pre-school learners' performance in psychomotor and creative activities in Nzambani Sub County, Kitui County.

5.2 Discussion of the Findings

This section discusses the results and analysis done in chapter four as per the objectives as follows:

5.2.1 School Environment and Pre-school Learners' Performance in Psychomotor and Creative Activities

With regard to the influence that school environment had on Pre-school learner's performance, this study established that the school environment in which the learners were exposed too had most of essential psychomotor activities such as sewing, throwing a ball and typing, and creative activities materials as per the syllabus requirement. As a result, it may be noted that the availability of these facilities may have a positive influence on learners' performance in psychomotor and creative activities. This concurs with Venetsanou and Kambas (2016) who found that the presence of simple games equipment

such as balls, skipping ropes and toy cars have been observed to have a positive association with motor skill proficiency when adjusted for children's age. Similarly, in a study done by Jing Hua et al. (2016) it was noted that children's motor development was greatly enhanced by handling motor toys in form of manipulative materials, musical materials, body exploration materials and locomotor materials.

The findings of this study showed that the classroom environment was not adequate enough to support the learning of Pre-school learners. This may have an effect on the placement of learning materials as well as storage within the internal environment and hence interfering with the performance of learners. In this regard, Jing Hua et al. (2016) noted that proper classroom arrangement is crucial in enhancing psychomotor and creative activities for children. Additionally, the furniture and learning materials should be adapted to maximize the participation of children with disabilities.

In a study done by Melly and Mwangi (2017), it was noted that head teachers downgraded the provision of essential materials for creative activities to the periphery. Additionally, half of the schools sampled lacked essential creative activity resources. This finding resonates with that of this study whereby it was observed that most of the facilities were not adequate to support the performance of pre-school learners in psychomotor and creative activities. Moreover, some of the head teachers did not take time to invest in securing resources and facilities to support the activities.

While investigating on the influence of school-based factors on Pre-school children participation in creative activities in Marani Sub-County, Kenya, Mokaya (2019) established that Most of ECDE centres had inadequate educational resources while most of Pre-school teachers required professional development regarding creative activities.

This finding was also established in this study whereby majority of the respondents disagreed with the statement that there are adequate storage facilities for psychomotor and creative materials in the school. Moreover, it was also noted that the spaces available were not adequate to support the learning process.

5.2.2 Teachers' Support and Pre-school Learners' performance in Psychomotor and Creative Activities

This study sought to examine the influence of Pre-school teachers' support on learners' performance in psychomotor and creative activities. From the findings, it was established that most of the teachers lacked sufficient knowledge on psychomotor and creative activities. This finding was similar to Lai-Yeung (2014) finding that despite the fact that most pre-school teachers are not trained on psychomotor and creative activities, they ought to undertake training on psychomotor and creative activities matters since it is a complex field which requires professional knowledge to handle it. This implies that schools should sponsor teachers for seminars and workshops in regard to psychomotor and creative activities. The trained teacher discusses with the pupil on the issue and they are able to help the pupil develop interest in such activities. Moreover, pupils trained by experienced career personnel, tend to develop a positive attitude towards these activities. Therefore, it is not just about getting interested about these activities, but also training and close monitoring for a good result during engagement in the activities.

It was highly agreed that learners should be taken through psychomotor and creative activities right from the pre-school. In this regard, it is important to carry out psychomotor and creative activities from an early age in life. This is to help the children develop their mental, physical and academic wellbeing early in life. It is important to note

that most learners are not able to prepare enough to engage in these activities when they have gone too far with the pre-school education. In supporting this finding, a previous study done by Dere (2019) showed that teachers had a greater role to play for they are crucial in guiding the children in the appropriate use of materials, provide opportunities to imagine and explain their ideas and boost their confidence as they form individual self-concept. This is because the pupil tends to get confused especially on realizing that they might not be ready enough to develop an interest in activities they have always desired. In some situations, pupils realize that the time remaining is inadequate to engage in any related activity or do any studies as age may have as well catch up with them among other factors. In addition to that, a similar finding by Ariani (2017) shows that such situation makes the pupils not to be able to understand the content they are studying since they have already become too exhausted to an extent that they are no longer able to understand. Consequently, psychomotor and creative activities should be done right from preprimary. The pupils will continue building their dream having knowledge on the extracurricular activity they want to work for in primary school and beyond as some of these activity are critical in job creation and mental growth. In line with this observation, this study found that pupils are guided by the teachers on psychomotor and creative activities as they choose their preferred activities in pre-schools in Nzambani Sub County, Kitui County.

The findings further showed that pupils are usually not sure about the activities they should engage in therefore teachers should do their best in helping these pupils build on their dream. Greenberg (2014) noted that teachers need to be responsive to children's ideas and play and extend children's learning via open ended questioning, guiding their learning challenging their thinking and providing feedback. The researcher found out that a few

teachers advised pupils to choose activities that they are fascinated about. As pointed out by Wagner (2008) teachers need to take up that role of guiding the learners. Additionally, Bakken et al. (2017) further argued that teachers need to move from primarily being the information keeper and dispenser to be an orchestrator of learning where knowledge is co-constructed with the student. Pre-school teachers are expected to be guides, facilitators, mentors, sources and resources who make use of spontaneous teachable moments to scaffold children's learning.

From the analysis, it was established that pupils are given ample time by their teachers to choose and engage in psychomotor and creative activities of their choice. However, the findings also showed that there were a few teachers who thought that there is no need to give the pupils ample time to consult and decide on the activities. It is important for the teachers to at least inform the pupils about the importance of psychomotor and creative activities and the greater importance of finding a particular activity and concentrating on it and latter convert it to a career of sorts. In an observation made by Salamatu et al. (2017), the way pre-school teachers respond to the child's work of art has great implications in the development of the child's self-concept.

The pupils can consult from the older siblings and activity trainers for guidance about their activity choices. Hence, they will get information of the right activities and how to nurture these talents for a better future as there are direct linkages between these activities and their future careers. In the same light, Vanderloo, Tucker, Johnson, Burke and Irwin (2015) submit that apart from providing materials for learners' manipulation, teachers' competency and extent of psychological and physical support have major contributions to children's psychomotor development and future life.

5.2.3 Parental Support and Pre-school learners' performance in Psychomotor and Creative Activities

This study sought to ascertain influence of parental support on learners' performance in psychomotor and creative activities in Nzambani Sub-County, Kitui County. From the findings, it was established that majority of the parents guide pupils on how to relate with psychomotor and creative activities. The creative department in many schools is always on the lookout so that no one is hurt or hurts another. There are pupils who are physically and socially imbalanced and this result in aggression, bullying, fighting, calling each other names, stealing and sexually harassing others. In line with this finding, Kupers et al. (2019) indicated that by taking an active role in Pre-school education process, parents could help ensure that their children have the maximum support to develop to their full potential. However, from the findings, it was established that most of the parents do not guide pupils on how to reduce conflicts with each other during the execution of this activities. This is despite the active role played by parents at checking how pupils relate and participate in different activities to avoid trouble. In concurrence, a study by Wyver et al. (2019) observed that most parents and teachers fail to offer the expected support citing lack of stable career after school.

Teachers indicated that parents guide pupils on how to apply psychomotor and creative activities. Additionally, most parents direct and guide pupils regarding the influence of psychomotor and creative activities. The relevance and importance of the activities is properly spelt out to the pupils before embarking on the exercises. In line with this finding, Meyers (2018) emphasizes the need for the adults to act as facilitators of the experience, and not as instigators regarding Pre-primary art. Additionally, Meyers (2018)

indicated that adults should provide the space, materials, and the opportunities and then stand back, as the kids exercise their creative power.

The findings also showed that most of the parents direct pupils on the health effects of psychomotor activities. Due to the advanced technology, many pupils are getting involved in psychomotor and creative activities and as a result, parents must get involved so as to minimise the negative health impact of psychomotor and creative activities. That is the reason why schools are working hard to ensure that their pupils do not suffer the negative consequences. In contrary with this finding, Chepindy (2014) established that most parents in Lang'ata Nairobi County perceive people who are inclined in fine and performing arts as social misfits and hence in view of such perceptions, parents and teachers are likely to offer lopsided support to children who exhibit keen interest in artwork.

The findings on guidance of pupils who lose their interest in psychomotor and creative activities are usually not done. This is because many parents are not well trained in the field of psychosocial activities and training. They, therefore, do not find it advisable to guide a pupil who has lost interest in psychomotor and creative activities as they think that it will make the pupil not concentrate on his/her studies. They argue that if they carry out these counselling sessions on such pupils, that they could ruin their self-esteem. A previous study carried out by Taneri (2012) showed that initially parents lacked adequate knowledge to be effective in guiding children through creative activities. Moreover, lack of knowledge also limits their perception on what exactly to address in terms of creative activities. On the same note, various researchers (Donovan, Green, & Mason, 2014;

Rotherham & Willingham, 2010) shared that the importance of creativity is now widely recognized within education as an essential 21st-century skill.

Discipline is key to academic performance and any other sphere of life therefore parents are required to work hard in ensuring that pupils are disciplined in formal and informal activities. Parents understand that school activities without discipline leads to no order, pupils are also likely to be unruly thus difficult to take them through this various activities as parents will also have negative attitudes towards these pupils. Consequently, overall engagement and interest in the same will drain away. In line with this finding, Taneri (2012) observes that parents, who keep abreast of what is happening in their child's Pre-school classroom, make a better connection between what is learned at school and what takes place in the home.

5.3 Summary

Regarding the school environment, most of the schools had instructional materials for psychomotor and creative activities. Additionally, audio visual resources are an integral part for psychomotor and creative activities in the schools. In terms of instructional space, it is evident that majority disagreed that instructional space has been provided for psychomotor and creative activities within the schools. Majority of the respondents were positive that their school has most of essential psychomotor activities such as sewing and typing, and creative activities materials as per the syllabus requirement. However, it was disagreed that the available psychomotor and creative activities materials are adequate for the all Pre-school learners. It was also disagreed among the teachers that there was adequate space for indoor play and other activities. In terms of outdoor space, majority of the teachers disagreed with the statement that there was adequate space for outdoor play and

other activities. Additionally, teachers further disagreed to the statement that the space for outdoor activities is safe for pre-school children. With regard to funds allocation, the teachers disagreed with the statement that the ECDE class has a funds allocation for psychomotor and creative activities materials. There were no adequate storage facilities for psychomotor and creative materials. It was also established that the head teachers were determined in the acquisition of psychomotor and creative activities material. Teachers observe safety when having psychomotor and creative activities with learners.

In terms of teacher support, it was found that pre-school teachers lack sufficient knowledge to guide pupils on psychomotor and creative activities. Most pre-school teachers conduct psychomotor and creative activities to pupils' right from preschool. Teachers guide pupils on psychomotor and creative activities as they choose their preferred activities. Majority of the teachers suggest that pupils are not given ample time to engage in psychomotor and creative activities. Majority of the teachers agreed that most pupils demonstrate commitment to excel in psychomotor and creative activities. Most teachers do not advise pupils on the psychomotor and creative activities. Most of the pre-school pupils are not definite on the psychomotor and creative activities they would like to engage in. Teachers assist pupils to set the psychomotor and creative activities targets in line with the higher education prospects and career requirement. Most teachers agreed that most pupils are always keen on psychomotor and creative activities requirements. Teachers get a large number of pupils who through their will consult them on the career requirements so that they prioritize on what to do on matters psychomotor and creative activities to bolster their careers.

On the objective of parental support, in reference to the information given by the pre-school teachers and head teachers, the study established that majority of the parents agreed in their responses that they guide pupils on how to relate with psychomotor and creative activities. Most parents do not guide pupils on how to reduce conflicts with each other during the execution of these activities. Parents also agreed to a large extent that they guide pupils on how to apply psychomotor and creative activities. Most Parents also agreed strongly that they direct and guide pupils concerning the influence of psychomotor and creative activities. Most of the parents direct pupils on the health effects of psychomotor activities. Majority of the parents do not direct pupils on effects of psychomotor activities on future careers.

Most of the parents do not guide pupils on the relationship between psychomotor and creative activities. Majority of the respondents disagreed with the statement that pupils are guided on the measures to observe when engaging in psychomotor and creative activities. Guidance of pupils who lose their interest in psychomotor and creative activities is usually not done by majority. Most of the parents agreed that they identify and direct any physical challenges. Parents also identified pupils whom their parents are unable to sustain fees for them to engage in such activities. Majority of the respondents agreed with the statement that they identify and direct pupils who are affected by these activities. Parents direct and guide pupils' on the effects of indiscipline when engaging in psychomotor and creative activities.

5.4 Conclusion

Concerning the school environment, it could be concluded that the school environment is not fully conducive to support the PP2 learners' performance in

psychomotor and creative activities. This is because the facilities are inadequate. Additionally, materials required to support the learning process are also not available and not all the head teachers are at task of securing the materials for the pupils to use.

Based on the teacher support variable, it is concluded that the teachers do not undergo a serious training in psychomotor and creative activities. It shows that even if many are trained teachers, very few of the trained teachers have undergone psychomotor and creative activities training. It is also clear that psychomotor and creative activities have a direct bearing on student performance and can lead to good or bad performance based on its management.

In terms of parental support, all parents have got a role to play when it comes to students' performance in both psychomotor and creative activities. However, most parents do not engage their children in these activities due to several factors ranging from lack of training and expertise among other factors resources included. Additionally, some of the parents are not fully aware of the importance of psychomotor and creative activities. The negative perception towards the activities limits their involvement in supporting the children to learn.

5.5 Recommendations of the Study

From the findings' summary and conclusion of this study, there are a number of recommendations that are presented based on the research objectives:

5.5.1 School Environment and Pre-school Learner's Performance in Psychomotor and Creative Activities

From the study findings, it clearly showed that the available psychomotor and creative materials were inadequate. Again the space for indoor and outdoor activities was

found to be inadequate. For the purpose of improving the school environment to enhance the pre-school learners' performance in psychomotor and creative activities, this study recommends that the environment plays a critical role too in ensuring that there is success in in the implementation of psychomotor and creative activities. Therefore, the board of school management, teachers and the supporting staff need to create an enabling environment for the implementation of this programme. Adequate space needs to be allocated for these activities around the institution as well as the home environments. An enabling environment in terms of resource allocation financially or through acquisition of the necessary infrastructure to facilitate the growth and development of this activities should also be emphasized on by the management.

In order to achieve effectiveness in psychomotor and creative activities, the government should first ensure that no school is so much disadvantaged in terms of physical and teaching facilities, and competent human resource. The government should set aside a special fund meant for uplifting disadvantaged schools to be at par with other well-endowed schools.

5.5.2 Pre-school Teachers Support and Pre-school Learner's Performance in Psychomotor and Creative Activities

The findings on the Pre-school teachers' support indicated that most of the teachers lack sufficient knowledge on psychomotor and creative activities. It is recommended that both teachers and head teachers should be keen in implementation of psychomotor and creative activities. In order to mitigate the negative effects of lack of teaching psychomotor and creative activities to pupils, teachers and head teachers should put a lot of seriousness in the implementation of this unit rather than plotting it on the timetable without actual

teaching. Teachers would therefore be needed to ensure that psychomotor and creative activities are included in the school timetable and make it part of the syllabus for ease of inclusion in the day to day activities of the child.

It is imperative for all the teachers regardless of their school ranking to be engaged in psychomotor and creative activities development workshops and seminars. The knowledge and experience gained from such engagements can be used to uplift their schools and the general pupils' welfare. This calls for the TSC to make it mandatory for all teachers to attend and participate in these trainings.

5.5.3 Parental Support and Pre-school Learner's Performance in Psychomotor and Creative Activities

It was observed that majority of the parents do not engage children in psychomotor and creative activities due to lack of training and expertise among other factors. However, parents have a role to play to support children in those activities. This study therefore recommends that parents should be part and parcel of the implementation process and that the exercise should be taken further to cater for children who do not attend school either by design or default. They have to be informed vividly on the importance of their involvement in the whole activity. Implementation and rollout of this knowledge to parents and how it should be implemented should be phased in order to accommodate the illiterate or those parents who are completely opposed to this idea. The psychomotor and creative activities teachers need to conform to the best recommended training practices where the needs of the pupils are looked into. In addition, pupils should be guided in the performance of psychomotor and creative activities.

5.6 Suggestions of Further Studies

There is need for further studies to be carried out to examine the pre-school learners' performance in psychomotor and creative activities. Some of the suggested further studies are as follows:

1. Effect of Education policies on the adoption of psychomotor and creative curriculum in pre-schools in Kenya.
2. The effectiveness of teaching processes for psychomotor and creative activities in pre-schools in Kenya.

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APPENDICES

APPENDIX I: LETTER OF TRANSMITTAL

Dear Respondent

I am a Post-Graduate Student in the Africa Nazarene University, pursuing a master's degree in Education. I am currently carrying out a research on: **DETERMINANTS OF PRE-SCHOOL LEARNERS' PERFORMANCE IN PSYCHOMOTOR AND CREATIVE ACTIVITIES IN NZAMBANI SUB-COUNTY, KITUI COUNTY, KENYA**, as part of the course requirement. For this reason, therefore, your school has been sampled for the study and you have been selected as a respondent.

Kindly answer the questions as candidly as possible. There is no right or wrong answer. Do not write your name on the questionnaire. The results of this study will be used for academic purposes only. Thanks

Yours Faithfully,

CECILIA NDUKU SAMUEL

CELL PHONE: 0711883354

EMAIL ADDRESS: cecilianduk1986@gmail.com

APPENDIX II: PRE-SCHOOL TEACHERS' QUESTIONNAIRE

You are expected to respond to all questions by ticking (✓), commenting or providing information as requested

SECTION A: General Information

1. Gender: Male Female

2. Age bracket:

Below 30years 31 – 35 36 – 40 41-45 Above 46

3. Type of School: Public Private

4. Highest level of education in teaching Profession attained.

P1 Certificate Diploma Bachelor's Degree

Post graduate Degree

5. What is the range of your teaching experience?

5 years and below 6 – 10 years 11 – 20 years Over 20 years

6. Do you have any training on how to instruct in psychomotor skills and creative activities in ECDE?

Yes No

7. If yes at what level of educations were you trained on use of psychomotor and creative activities in ECDE?

Certificate Diploma Bachelor's Degree Postgraduate

Seminars In-service

SECTION B: School Environment Promotion of Psychomotor and Creative Activities

SD=Strongly Disagree D= Disagree N = Neutral A= Agree SA = Strongly Agree

Statement	SD	D	N	A	SA
My school has instructional materials for psychomotor and creative activities					
Audio visual resources are an integral part for psychomotor and creative activities in our institution					
Instructional space has been provided for psychomotor and creative activities within the school					
My school has most of essential psychomotor activities such as sewing, throwing a ball and typing, and creative activities materials as per the syllabus requirement					
The available psychomotor and creative activities materials are adequate for the all Pre-school learners					
We have adequate space for indoor play and other activities					
We have adequate space for outdoor play and other activities					
Our space for outdoor activities is safe for Pre Primary 2 children					
The ECDE class has a funds allocation for psychomotor and creative activities materials					
There are adequate storage facilities for psychomotor and creative materials					
My head teacher is very committed in acquisition of psychomotor and creative activities materials					
We observe safety when having psychomotor and creative activities with learners					

SECTION C: Pre-school Teachers Support of Learners' Psychomotor and Creative

Activities

SD=Strongly Disagree D= Disagree N = Neutral A= Agree SA = Strongly Agree

Statements	SD	D	N	A	SA
psychomotor and creative activities lessons boosts the child self-concept					
psychomotor and creative activities lessons creates opportunity for child's imagination					
I always apply guidance in appropriate and safe use of creative materials					
I have competency in training and guiding pupils in psychomotor and creative activities					
I normally prepare scheme of work and lesson plans for my psychomotor and creative activities lessons					
I always utilize all the 8 lessons allocated for psychomotor and creative activities					
I give pupils individualized attention in their creative activities					
I normally assess motor abilities of my pupils and respond appropriately					
I make use of psychomotor and creative activities, to develop learners critical thinking and problem solving skills					
I use physical activities and creative activities to make pupils feel safe and develop self-confidence.					
I sometimes let learners have self-directed activities such as drawing, painting and play					
I regularly inspect recreation facilities such as swings, ropes tyres, playing ground to ensure learners' safety					
Provide Pre-school learners with opportunities to collaborate with one another in creative activities, such as class group constructions, puppet play, and dance moves.					
Guide learners' in imaginative play such having roles as wild or domestic animals					
I integrate creative arts in my teaching to enhance children's fine and gross motor skills e.g. use of paint brush and skipping in number work and counting					
I guide learners use of dramatic play and puppetry to develop language and social skills					
I am constantly in touch with learners' parents to ensure continued exposure to psychomotor and creative activities at home					

SECTION D: Parental Support on Pre-school Learners Psychomotor and Creative

Activities

8. Please indicate your level of agreement or disagreement in regard to the following statements on how parents support their children to enhance psychomotor and creative activities.

SD=Strongly Disagree D= Disagree N = Neutral A= Agree SA = Strongly Agree

Statement	SD	D	N	A	SA
Parents cooperate with teachers in assessing the child progress in tasks that require fine motor and gross motor skills at home					
Most of the parents are aware of their expected support as far as psychomotor and creative activities are concerned					
Parents are normally receptive and participate actively in learners assignments					
Parents provide creative materials at home and at school					
Parents assist their children in accomplishing home work					
Parents assist in assessment and monitoring of learners progress					
Parents are crucial in assessing student attitudes towards psychomotor and creative activities					
Parents are keen in attending class consultative meetings					
Parents call/write messages to follow up on their child progress					

APENDIX III: HEAD TEACHERS' INTERVIEW SCHEDULE

The head teachers' Interview was guided by the following questions;

1. Psychomotor and creative activities is one of the key subjects in Pre-school Competence Based Curriculum (CBC). How does your Pre-school teachers handle Psychomotor and creative activities?
2. How would you rate the general performance of Psychomotor and creative activities in your school at Pre-school level?
3. How adequate are the materials needed for ECDE psychomotor and creative activities in your school adequate?
4. How does your school accommodate indoor and outdoor psychomotor and creative activities?
5. Briefly explain the extent to which your pre-school teacher(s) exhibit the level of creativity and innovativeness.
6. How does your pre-school teacher(s) integrate psychomotor skills and creative activities in teaching and learning?
7. The new CBC requires that both pre-school teachers and parents cooperate in accomplishing the children's learning activities. How would you describe your school Pre-school parental support of their children in creative and psychomotor activities?

**APPENDIX IV: PRE-SCHOOL PSYCHOMOTOR SKILLS AND CREATIVE
ACTIVITIES OBSERVATION SCHEDULE**

Here below is a psychomotor skills and creative activities observation schedule. I was able to observe the pre-school learners' abilities as they performed psychomotor and creative activities. The assessment of learners was done through a direct observation under the guidance support of their respective teachers and trainers and rated them accordingly.

Learners' Creative Activities	Poor	Average	Good	Very Good	Excellent
Painting					
Printing					
Coloring					
Tearing, Pasting, Sticking					
Tracing					
Singing simple songs					
Threading					
Playing musical instruments					
Fine Motor Skills					
Pencil skills					
Scissors skills					
Construction skills					
Doll dressing and Manipulation					
Dressing					
Eating					
Sand play					
Hygienic skills					
Indoor Gross Motor Activities					
Dancing					
Dance and movement classes					
Playing pretend					

Arts and crafts activities					
Jumping					
Gross Motor Skills					
Jogging					
Skipping					
Hopping					
Obstacle courses					
Swimming					
Balancing					
Throwing					
Catching					
Kicking					
Rolling softballs					
Swinging					
Sliding					
Climbing					
Hitting the target					
Paper plate skates					
Jump the brook					
Soccer					

Key

- Excellent** When all pupils are able to perform the named Psychomotor skills and creative activity
- Very Good** When more than $\frac{3}{4}$ but less than 1 are able to perform the said psychomotor skills or creative activity
- Good** When $\frac{3}{4}$ of pupils are able to perform the said psychomotor skills and creative activity.
- Average** When $\frac{1}{2}$ of pupils are able to perform the named Psychomotor skills and creative activity.
- Poor** When less than $\frac{1}{4}$ of pupils are able to perform the named creative activity.

APPENDIX V: INTRODUCTION LETTER FROM ANU

24th June 2020

RE: TO WHOM IT MAY CONCERN

Samuel Cecilia Nduku (17J01CMED004) is a bonafide student at Africa Nazarene University. She has finished her course work and has defended her thesis proposal entitled: - *"Determinants of preschool learner's performance in psychomotor and creative activities in Nzambani Sub-County, Kitui County, Kenya"*.

Any assistance accorded to her to facilitate data collection and finish her thesis is highly welcomed.

Rodney Reed, PhD.

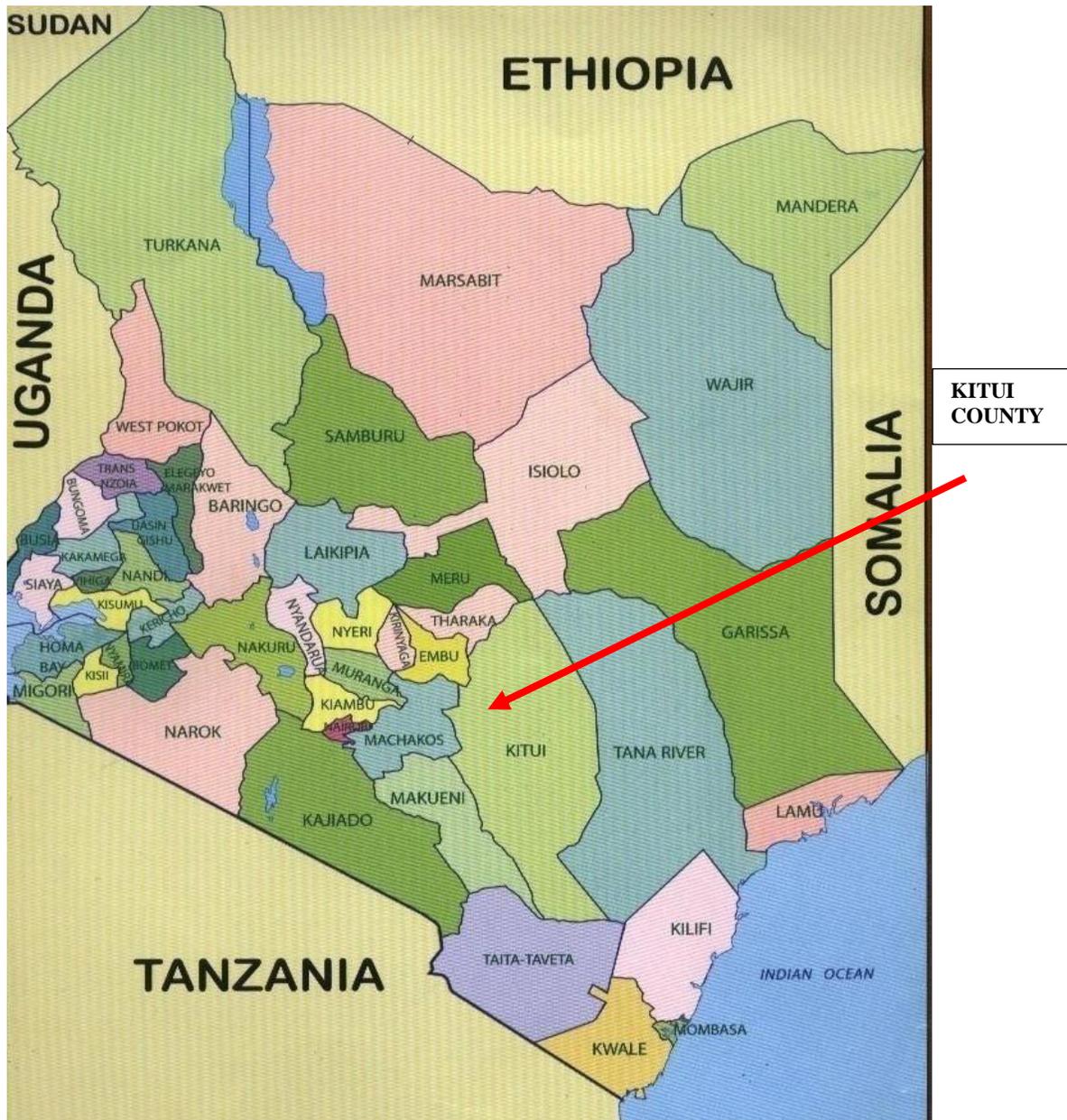
A handwritten signature in cursive script that reads 'Rodney R. Reed'.

DVC Academic & Student Affairs.

APPENDIX VI: RESEARCH LICENSE FROM NACOSTI



APPENDIX VII: MAP OF KENYA SHOWING KITUI COUNTY



APPENDIX VIII: MAP OF KITUI COUNTY SHOWING NZAMBANI SUB COUNTY

