

**SELECTED FACTORS INFLUENCING THE IMPLEMENTATION OF
LEARNERS' PSYCHOMOTOR ACTIVITIES IN PUBLIC PRE-PRIMARY
SCHOOLS' CURRICULUM, IN KENYA**

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This thesis is my original work and has never been presented to any other University or institution for an academic award.

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DEDICATION

I dedicate this research document to my late son Bradley, my late parents Mr. Joram Avosa and Mrs. Martha Avosa, and spouse Violet Ahinda who really waited to see their names on this research thesis. I did this work for you. Unfortunately, you left before you saw the contents of it. How I wish you were here to witness this day, a day you truly wished to see but the four of you rested in quick successions. I thank God the Almighty for He left a family behind to soldier on. I now dedicate it to my family.

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ABSTRACT

Studies indicate that learners' participation in the psychomotor activities is limited and that more emphasis is put on the academic-oriented activity areas. The purpose of this study was to establish selected factors influencing the implementation of the learners' psychomotor activities in the pre-primary school curriculum in Vihiga County, Kenya. The objectives of the study were; to find out the influence of the teacher factors, examine the influence of the physical resources, examine the influence of parental participation, and determine the influence of the policy factors on the implementation of the learners' psychomotor activities in the public pre-primary schools in the curriculum in Vihiga County, Kenya. The findings of the study might be useful in informing parents on importance of psychomotor activities in learners' education, improve the national policies through Ministry of Education of Education and Kenya Institute of Curriculum Development. It might also inform future research on play. The study adopted a mixed method approach specifically a concurrent triangulation research design. The study was anchored on Maria Montessori's theory of children's play. The target population was 432 that included; 110 head teachers, 110 teachers, 110 parents, and 12 ECDE supervisors. A sample size of 88 that included; 33 head teachers, 33 teachers, 10 parents', and 12 ECDE Sub County supervisors was used for the actual study. The questionnaire schedule was administered to the head teachers and teachers while the focus group discussion guide was used for probing parents and ECDE supervisors. The document analysis and the observation schedule were used to strengthen the findings of the study. The validity and reliability of the instruments were established during the pilot study from the neighboring Sabatia Sub County that was outside the actual study locale. Validity was ensured based on the construct and content validity. The instrument's reliability was ensured through the test-retest technique. An instruments' reliability coefficient of 0.7 was used for the actual data collection. The qualitative data was analyzed using prose and narrative form. Quantitative data were analyzed using descriptive statistics such as frequencies, means, and percentages, and findings presented in pie charts and tables. The inferential statistics, ANOVA, was used to establish the relationship between the independent and dependent variables. The study ensured the ethical considerations. The results showed a significant difference between teacher factors and the implementation of the learners' psychomotor activities in the curriculum $\{F(6, 25) = 2.552, p = .000\}$. The results showed a significant difference in the means between physical resources implementation of the learners' psychomotor activities in the curriculum $\{F(6, 25) = 2.840, p = .000\}$. The results further showed that there was a significant difference between parental participation and the implementation of the learners' psychomotor activities in the curriculum $\{F(6, 25) = 8.661, p = .004\}$. Finally, the results showed a significant difference between the policy factors and the implementation of the learners' psychomotor activities in the curriculum $\{F(6, 25) = 9.983, p = .000\}$. The study concluded that teacher factors, adequacy of the physical resources, parental participation, and policy factors enhance the implementation of learners' psychomotor activities in public pre-primary school activities. The study recommended that public pre-primary school management improve parental participation and provision of learning materials and equipment in the implementation of the learners' psychomotor activities in the public pre-primary school curriculum. A study should be conducted on selected factors influencing the implementation of psychomotor activities in private pre-primary schools to corroborate the findings of this study.

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ABBREVIATIONS AND ACRONYMS

CPPBOM	-	Chairperson of Public Primary Board of Management
DICECE	-	District Centre for Early Childhood Education
ECDE	-	Early Childhood Development Education
ECEC	-	Early Childhood Education and Care
ECD	-	Early Childhood Development
ECCD	-	Early Childhood Care and Development
ECDE	-	Early Childhood Development and Education
EFA	-	Education for All
EYE	-	Early Years of Education
HTQ	-	Head teacher Questionnaire
KICD	-	Kenya Institute of Curriculum Development
NACOSTI	-	National Commission for Science, Technology, and Innovation
PFGDG	-	Parents Focus Group Discussion Guide
PTTU	-	Preschool Teacher Trainer Questionnaire
SFGDG	-	Supervisors Focus Group Discussion Guide
SPSS	-	Statistical Package of Social Sciences
UNICEF	-	United Nations Children’s Fund
ZPD	-	Zone of Proximal Development

CHAPTER ONE

INTRODUCTION

1.1 Background Information

Early Childhood Education is intended to have holistic development and lay the adult foundation of the child, especially from zero to six years of age (Holt, Bremner, Sutherland, Vuliek, Passer & Smith, 2019). Play is essential to the development of children in all aspects. It forms a critical role in learners' ability in mental, social, and physical skills (Raudsepp & Pall, 2006). Most studies have indicated why play is pivotal to learners' self-fulfillment of mental, emotional, and social stature (Miller & Almon, 2009; Wood & Attfield, 2005).

Frost, Wortham and Reifel (2008) opine that there is a strong relationship between early childhood play and learning of numeracy, literacy, problem solving and language acquisition, and emotional, physical, and social skills. The play environment for children should offer plenty of opportunities that permit every child to have their own choice and develop wholesomely (Wohlwend, 2011). Early Childhood Development Education (ECDE) should be given to every child because of its importance in developing an individual child's confidence and competency in learning. Psychomotor activities act as a foundation of learning and encourage the acquisition of knowledge and skills and social responsibility (Hirst, Jewis, Sojo & Cavagh, 2011). Thus, children in preschools should be provided with a good environmental climate and appropriate equipment for them to be exposed to their discovery, draw conclusions, perform problem solving and manipulate materials to promote self-esteem.

Hornby (2010) defines play as any pleasurable self-motivated activity designed for enjoyment without considering the result. Greenfield (2004) argues that play is the visible language of childhood where one sees and hears the child functioning revealing his concerns, conflicts, information, misinformation, wishes, hopes, pleasures, and questions. Howard (2010) asserts that play does not have a simple answer. In this view Howard (2010) considers playing as generally centers on having fun being outdoors, being with friends, choosing freely, not working, pretending, erecting fantasy, drama, and playing games. Freud defines play as an activity in which children repeat everything that has made a great impression on them in real life, they recreate the strength of the impressions, and this makes them become masters of the situation (Payne & Isaacs, 2012).

Psychomotor activities that are conducted outside the usual classroom environment assist in addressing areas of a child's physical well-being and having an in-depth level of commitment and learning. White (2015) noted that play activities among learners are associated with increased learners' active participation and social-emotional learning, school commitment, and academic performance. The hands-on learning experiences provide opportunities for students to engage in the process of their education. Most learners prefer outdoor psychomotor activities way of learning other than concentrating on the rote methods of learning. Therefore, learning through psychomotor activities enhances the chances of enabling the learners to learn more effectively and faster (Ronkko & Aerrila, 2015).

Studies show that outdoor playtime correlates with an increase in psychomotor activities. A study by Cleland, Crawford, Baur, Hume, Timperio and Salmon (2008) indicate that

for every additional hour of outdoor play children that are aged between 10-12 years' physical activity increased by two hours a week, and cases of overweight decreased from 41% - 27%. Nakpodia (2003) notes that preschool children should be provided with the following fundamentals that are vital for human growth and life; health, aesthetic, motor, emotional, intellectual, nutritional, physical, and social development fundamentals that are vital for human growth and life. These fundamentals result in a child's educational attainments preschool and other successive levels of learning.

Any time allocated for psychomotor activities is not just essential for health but also potential for teaching and learning. Most researchers believe that outdoor class activities are not only effective for learning but also help learners' retention of content proficiency that continues up to their adulthood. In the United Kingdom, the Learning Outside the Classroom Manifesto (DfES, 2012) concludes that outdoor class teaching and learning has a far-reaching impact on learners' educational performance because it influences learners' lifestyle, behavior, decision making, and work.

Sharot and Phelps (2004) indicate that memory is a bit complex that encompasses: recalling, perception, consolidation, and encoding. Research studies establish that psychomotor activities outside the classroom provide: exploration and play opportunities, freedom, novelty, enjoyment, incidental learning, autonomy, competency in social contexts, and creativity (Beard & Wilson, 2002; Bixler, Floyd, & Roggenbuck, 2002). Teachers' adaption of play activities during lesson presentation further reveals that it increases pupils' memory retention and educational performance (Eick, 2011).

Psychomotor activities as teachers' methodological approach help; break classroom monotony, limit discipline, reduce classroom management difficulties, increase both teacher's and learners' enthusiasm and engagement, and greater self-esteem. This relationship improves students' attendance, acquisition of social skills, and more so improved academic performance (Simone, 2002; Falco, 2004). In the same vein, studies on outdoor play activities establish increased coping, self-efficacy, reduced delinquency, increased self-esteem, and competence, and, decreased violence and suicidality (Ungar, Dumond, & McDonald, 2005).

Research studies indicate that frequent psychomotor activities result in children's stronger, healthy, and happier learners unlike those not exposed to psychomotor activities (Meckison, 2014). If learners are to use their whole body, then play activity is necessary. Play activities enable children to freely interact with playfield facilities and materials to motivate and stimulate the appropriate age of physical development. It can be observed that ramps and bridges enhance coordination and manipulation whereas swings and slides encourage balance, movement, and coordination. Gunseli and Guzin (2017) opine those psychomotor activities improve preschool learners' social-emotional, linguistic, motor, and cognitive skills. Psychomotor activities improve learners' brain growth and development. Jensen (2000) notes that play activities increase the ability to learn and reason.

Quigley, Pongsanon and Akerson (2011) averred that the psychomotor activity in education is efficient in improving literacy knowledge skills and perception of kinds of science for learners in both primary and pre-schools. Similarly, Bar-tosh (2003) concludes that play activity has been found to promote learners' acquisition of;

mathematics concepts, writing, reading, listening, and critical thinking skills. Other studies Ouvry (2003) and Rivkin (2000) indicate that an environment that supports outdoor activities develops learners' observation skills. The psychomotor activity among learners at all levels of learning assists in a decrease in stress and promotes emotional and social development (Weinstein, Przybylski & Ryan, 2009; Kuo & Taylor, 2004; Ginsburg, 2007).

However, studies have shown that despite the provision of a suitable play environment in schools, most children are not engaged in play activities although a significant positive relationship exists between psychomotor activities and learning (Clements, 2004; Rose, Morgan, Kifley, Huynh, Smith, & Mitchell, 2008). Factors that may contribute to such include; parental fear of their children's safety, children are no longer free to interact with neighbors, the need for academic excellence, and working-class parents being unable to monitor their children's educational activities.

The children's playgrounds are crucial in the acquisition of psychomotor activity to enable them to flourish in their later years of learning (Mistrey, 2011). The adequacy and availability of these designed areas should be identified, safe and provided to stimulate learning and exerts fun experiences. Mistrey (2011) opines that playground shape the actions and experiences of the learners during the learning process. The playing fields and infrastructure are the prospects through which pre-primary schoolchildren can acquire emotional and mental capabilities.

At first, children play alone then alongside other children, and finally together (Papalia, Gross, & Feldman, 2003). Today most researchers view Parten's characterization of children's play development as too simplistic.

Children of all ages engage in all of Parten's categories of play (Rogelberg & Stanton, 2010). Parten suggested that children who play alone may be at risk of developing social, psychological, and educational problems. Much non-social play consists of activities that foster cognitive, physical, and social development. Parten, in her study of four years old children, using observation schedules as the main tool for collecting data, found out that some kinds of nonsocial play, such as parallel play and constructive play, were most common among children who were good problem solvers, were popular with other children and were seen by teachers as socially skilled (Peace, 2014).

Young children follow unspoken rules in organizing dramatic play, staking out territory, and negating or setting the scene. As imaginative play becomes increasingly collaborative storylines become more complex and more innovative. The dramatic play offers rich opportunities to practice interpersonal and language skills and to explore the social roles, and conceptions (Gasson, 2009). For play to be more effective, children should learn through play and play materials (Papalia, Gross & Fedmam, 2003). Montessori also emphasized outdoor play. She had worked with special needs children and then discovered that play equipment for children could also use children with special needs effectively in early childhood.

Several factors that inhibit teachers' use of play activities range from teachers' and learners' characteristics, home factors, government policy factors school administrative,

and management factors. For example, in Canada, Puk & Behm (2003) noted that the diluted curriculum has done away with outdoor environmental science as a subject. This means that an indoor or classroom environment is the ultimate place for teaching and learning. Studies reveal that outdoor class activity has been hindered by policy guiding curriculum implementation, inadequate learning materials and teaching staff (Carrier, Thomson, Tugurian, & Stevenson, 2014; Mirka, 2014) making teachers adapt to indoor classroom teaching and learning (Dyment & Bell, 2008).

Teacher training during pre-service should stress psychomotor activity teaching and learning (Scott & Gough, 2003). These should be extended for other in-service courses as well. The teacher professional development initiatives that concern accredit outdoor play activities lead to improved teacher repertoire (Fisher, 2001).

Clements (2004) opined that school-going children in Japan, England, and Canada had spared inadequate time on play activities. In the USA, children's time for play has drastically reduced (Howard, 2010). This may be true for most world nations because of inadequate playing grounds resulting from the increase in population on land. Elkind (2007) affirms that the right to children's play activities has become a luxury. Zigler and Bishop-Joseph (2009) averred that most preschool learners' education is academic-oriented. Most parents, learners, and instructors largely emphasize academic performance other than play activities.

The caste system in Asian Countries, to some extent, denies children opportunities to play with other children (Glasgow & Whitney, 2009). This has made some Asian nations probably Pakistan and Ceylon excel in sports like hockey and cricket as children are

exposed to this early enough at the family level as well as at the pre-school level (Glasgow & Whitney, 2009). Play activities that facilitate this include skittle games, cats, and rats. Reports indicate that children are children and should be allowed to play as they grow within their families. However, those in poor families are denied the luxuries the caste system brings with it. Children should attend the same preschools maximizing interactions. Glasgow and Whitney (2009) noted that children should be given opportunities to relax and enjoy pleasurable activities. Play materials and facilities in a school field should consider the aesthetic and multiplicity to be easily available and accessible. The classroom subjects are sometimes too demanding and children require rejuvenation.

Clement and Sarama (2009) hold that play activity has a great potential to develop new knowledge and experiences in the child although some authors believe that play activity is a waste of learner's time with minimal value. The pre-primary school teachers recognize the importance of the children's development. The psychomotor activity not only enables the learners with diverse benefits but also assists children with health benefits (Park & Riley, 2015; Heather, Melinda, Ahn, & Fedewa, 2014). This has necessitated teachers to provide different opportunities for acquisition of the psychomotor activities in the pre-primary school curriculum.

Teachers of preschools in parts of the world have acknowledged the pivotal role played by psychomotor activities on children's holistic development. Some global studies have not only recognized the importance of play on children's health and growth but also the multiple roles of play on children learning outcomes (Heather, Melinda, Ahn, & Fedewa, 2014; Park & Riley, 2015). As a result, instructors are now according to children with

possibilities for each of the opportunities as well as organized and spontaneous play. Successful schools in academics in developing nations expose their learners to outdoor and indoor play activities that are pleasurable and devoid of competition (Glasgow & Whitney, 2009). They enable learners to participate in pre-school mini competitions like mini football, hockey, swimming, sliding, balancing, water play, pretend play, singing, and dancing (Rose & Tobin, 2007). This has made some Asian nations notably Pakistan and Ceylon excel in sports like hockey and cricket as children are exposed to this early enough at the family level as well as at the pre-school level (Ross & Tobin, 2007). Play activities that facilitate this included skitter games, as well as cats and rats.

The school environment is important for learners to play to improve and prosper (Abbott & Nutbrown, 2001). The out-of-school play activities are essential for improving cognitive skills that include; classification, naming, and recalling (Kinzie, Whittaker, Williford, De Coster, McGuire, Lee & Kilday, 2014). These creative activities develop creativity because the activity that takes place at the school foster advanced cognitive functioning, which encompasses; testing, problem solving, evidence-based, and planning. Teacher training in play activities encourages the utilization of play materials and facilities in teaching. For effective teaching of psychomotor activities, the pre-primary school teachers should efficiently be trained to adapt the play as a medium of teaching.

Goffin and Wilson (2011) assert that; teachers have an important responsibility of using the integration of play in the pre-primary school curriculum learning. These roles encompass; enhancing the high quality of the play activity, using diverse materials for play, adjusting playing activities, application of modern technological devices, and

modeling play creativity. Nonetheless, this might be affected by the teachers' level of training on how to apply psychomotor activities, hence the need for the current study.

Frost (2010) opines that the teaching and learning environment for play activities demands teachers' active involvement with the learners. This means that if teachers are engaged in playing games while at the same time playing, they provide the essence of initiative, decision making, creativity, and learner's creative thinking, with the main focus on learning materials and activities that enhance their deep understanding of the varied characteristics of the surrounding world. The pre-primary school teaching and learning environment enhances learners' development through play activities. The play has been discovered to facilitate effective class management and has a key role in the implementation of curriculum goals and objectives (Ostrosky & Meadan, 2010). The design of the physical environment arrangement influences the learner's behavior and attitude. According to Gauntlett (2014), the lack of teachers' use of playrights is because of unavailability and inadequate play facilities such as; recreation facilities, physical infrastructure, and play equipment in preschools. Inadequate resources like time, space, and materials are essential among pre-school learners. Play and other indoor activities require additional time.

Garibotti, Comar, Vasconi, Giannini and Pittau (2013) opined that although most of the children's motor skills are believed to have heredity factors, half of the variance is most likely to be influenced by the school and home environment. Therefore, it is pivotal to ascertain the environmental factors that are responsible to avoid toxins, identify children's risks and identify intervention measures. Bakken, Brown and Downing (2017) noted that parental participation is directly associated with the holistic development of children.

Bakken, Brown and Downing (2017) opined that the school environment is a major factor that influences the learner's psychomotor and creative development because a majority of children spends more hours in school. To trigger children's imagination, preschool teachers and parents should provide learners with play materials and equipment, opportunities for creative imagination and explain their ideas, provide their diverse viewpoints and appreciate learners' individuality (Dere, 2019). Children should also be encouraged to participate in imaginative play activities. In a nutshell, the pre-primary school parents' and teachers' support is important in enhancing and facilitating learners' psychomotor creativity and skills.

In Nigeria in Africa, Eriba and Regina (2011) argues that most Early Childhood Education Centers face challenges that range from high teacher: pupil ratio, inadequate funding from the federal and central government, ineffective supervision of the programs, teacher inadequacy and training, government negligence, and proliferation of preschool learning institutions.

In Liberia, Taylor (2008) observed that play influences children's language development. Children play with sounds combining them to make words. When they participate in outdoor play, they have a wider area to play in. Children imitate others in amusing voices as they play individually, practicing their language performance by talking to themselves.

Kenya has sanctioned the laws of the UN convention that guarantee children's rights and protection as also enshrined in the constitution of Kenya (GOK, 2010). This was initiated by considering the important role played by preschool education on a child's social and economic development and as a means to realize vision 2030.

The policy of apartheid in South Africa had a toll on children's interactions right from the parental level through preschool. Mwamwenda (2014) reports that in South Africa, children of whites in apartheid policy years hardly interacted with black kids during the era of the policy of apartheid. There were, of course, limited interactions, especially where blacks were employed as house servants during the apartheid era. About 10% of preschool children's play in the early grades consists of rough and tumble play, vigorous play that involves wrestling, kicking, tumbling, grappling, and sometimes chasing, often accompanied by laughing and screaming (Mwamwenda, 2014).

In Kenya, Waithaka (2010) noted that indoor play and outdoor play for preschool children should include both free play and directed play activities. According to Waithaka (2010), the teacher should be present when preschool children are playing to supervise, give direction, give guidance, identify, and nurture talent and give first aid in case it could be necessary. Wafula (2010) adds that plays equipment, both loose and fixed equipment, is essential in children's play.

The psychomotor activities are important educational processes that foster the mental, physical, social, emotional, and creative growth of children in Kenya (KIE, 2008). It was important for preschool teachers to understand the role of various outdoor play and physical activities and be able to select suitable ones for the different ages of children. For outdoor play activities, the teacher should guide, provide suitable equipment, and ensure the safety of children (Waithaka, 2010). In addition, outdoor play and physical activities give children opportunities to interact among themselves and thus develop their social skills. These activities demand movement and children derive a lot of pleasure when they master new skills (KIE, 2008).

According to KIE (2008), as children grow older, they start developing simple rules for their games. Those taking part in games are required to obey the set rules, laying down rules and obeying them forms the foundation of moral development in children in Kenya. Preschool children then start learning that they live in a society with rules that must be obeyed (Wafula, 2010). Outdoor play and physical activities also stimulate mental development. As children play with others and objects around them, they start to learn more about themselves (Ngaroga, 2006). They learn, for example, that some children cry more easily than others, others like some games and dislike others; some objects will roll or balance while others do not. Consequently, through play, children not only develop concepts but also name them. Their minds get stimulated to explore more of the world around them. Wilson (2010) identifies the importance of psychomotor activities for children's exercises and mental development. These exercises also help the circulation of blood and oxygen in their bodies. This helps the children to grow up to be strong and healthy (KIE, 2008; Thuku, 2017; USAID, 2013).

Play activities are seen to be important as they foster mental, physical, social, and emotional development and creativity in children. The major areas are body movement without apparatus, games, dances, and swimming. Body movement without apparatus includes locomotor activities like crawling freely, swinging, climbing, running, rolling, and walking on a line, and non-locomotive activities like turning, curling and bending (Abiero, 2010).

Body movement with apparatus includes activities like crawling through tunnels, using bean bags, using balls, jumping over ropes, climbing low frames, using slides, using

swings, walking on a rope, using balancing beams, sack racing, obstacle racing, tire racing, filling and emptying race, dressing competitions and relay ring (Kibet, 2010).

Abiero (2010) adds that games activities include singing games, hide, and seek games, chasing games, time telling games, ball games, singing games, pulling games, killing-a-rat games, filling and emptying games, shadow chasing games, playing while blindfolded games. Dancing activities include cultural dances, sacred dances, and instrumental dances, dancing to instructions, guided dances, and dancing to the rhythm. Kibet (2010) and Abiero (2010) suggest swimming activities like splashing water, playing with water, wading, floating, holding their breath in water and swimming should be available for the learners' holistic development.

The Kenya government through the Ministry of Education is determined to make psychomotor activities, especially in pre-schools an integral aspect of teaching and learning. According to the Kenya Institute of Education (KIE, 2008), teachers are encouraged to adopt play and play materials in the teaching and learning of preschoolers for physical, social, and intellectual growth. Despite the availability and use of pre-school syllabus, most ECDE teachers still emphasize learners' numeracy and literacy performance in disregard of psychomotor activities. Similarly, most ECDE teachers still apply the use of rote methods of teaching and learning instead of play activity learning that is learner-centered.

Kenya has recently revised its curriculum across all levels of learning that starts from pre-primary schools with more emphasis on psychomotor and creative activities. This activity area is destined to improve learners' development of motor skills. In Kenya, the National

Early Childhood Development Policy Framework (G.O.K., 2006) emphasizes most benefits of Early Childhood Education through play. Thus, play is considered an integral part of childhood and should, therefore, be incorporated into preschool teaching and learning.

Recent studies conducted in Kenya on children's outdoor play seem not to focus on the factors that determine children's engagement in play, but rather they appear to emphasize outdoor play and children's development as well as other aspects. For example, Lillian (2010) noted that most teachers spent most of their time teaching literacy and numerical activity that are considered more important than psychomotor activity. Learners looked like they were dull and inactive. Similarly, Livumbaze and Asige (2017) looked at the efficacy of teaching and learning resources on the secondary schools' students' academic performance in Vihiga County but failed to look at the selected factors influencing the implementation of the learners' psychomotor activities in the public pre-primary school curriculum in Vihiga County. Thus, the current study sought to investigate selected factors influencing the implementation of the learners' psychomotor activities in the public pre-primary school's curriculum in Vihiga County, Kenya, a gap this study intended to investigate.

1.2 Statement of the Problem

Learning through psychomotor activities is associated with increased learners' active classroom participation and socio-emotional development, school commitment, and academic performance. A report conducted by UNESCO (2014) affirms that a majority of the learners in the public pre-primary schools in Kenya have limited skills in reading, writing, speaking, and arithmetic. This affects the learners' transition from the public pre-

primary school levels to the primary school level as they lack adequate competency skills to enable them to adjust to the newly introduced curriculum demands and changes. The psychomotor activities are important because they arouse the learners' curiosity and enthusiasm during the teaching and learning processes. However, most teachers and parents seem to emphasize more on the children's cognitive domain rather than the affective and psychomotor skills due to pressure from the parents and other education stakeholders.

The newly introduced competency-based curriculum in Kenya is envisaged to ensure that each learner is competent enough in the following six core areas; communication and collaboration, self-efficacy, learning to learn, imagination and creativity, critical thinking, problem-solving and digital literacy. These core areas of learning require creativity and psychomotor skills among pre-primary school learners. According to the KICD (2018) inadequate infrastructure, equipment and materials, parental engagement, teacher staffing and unpreparedness, insufficient capacity building, and other stakeholders' awareness and consultations are some of the identified gaps that are barriers to the effective implementation of the competency-based curriculum.

To enhance the creativity and psychomotor activities in public pre-primary schools, KICD (2018) advocate for the teachers' and parents' cooperation to provide an enabling environment for the learners to realize their potential through the provision of psychomotor activities. In Vihiga County, most pre-primary schools are community and religious-based with low socioeconomic status hence, unable to equip schools with adequate play resources and equipment for psychomotor activities. Reports from Vihiga County Education office have not indicated any study on the psychomotor activities on

the children's performance. Nevertheless, there have been researched gaps concerning the selected factors influencing the implementation of the learners' psychomotor activities in the public pre-primary schools in Vihiga County, Kenya despite the introduction of the new competency-based curriculum that supports its implementation. Thus, this study tried to fill this gap by investigating the selected factors that influence the learners' implementation of psychomotor activities in the public pre-primary school's curriculum in Vihiga County, Kenya.

1.3 Purpose of the Study

The purpose of this study was to investigate selected factors that influence the implementation of learners' psychomotor activities in the public pre-primary school curriculum in Kenya.

1.4 Objectives of the Study

This study was guided by the following objectives:

- i. To find out the influence of the teacher factors on implementation of learners' psychomotor activities in the public pre-primary schools' curriculum in Vihiga County.
- ii. To examine the influence of physical resources on implementation of learners' psychomotor activities in the public pre-primary schools' curriculum in Vihiga County.
- iii. To examine the influence of parental participation on implementation of learners' psychomotor activities in the public pre-primary schools' curriculum in Vihiga County.

- iv. To determine policy factors that influence on the implementation of learners' psychomotor activities in the public pre-primary schools' curriculum in Vihiga County.

1.5 Research hypothesis

This study also tested the following hypothesis:

H₀₁: There is no significant difference between teacher factors and the implementation of the learners' psychomotor activities in the public pre-primary schools' curriculum in Vihiga County.

H₀₂: There is no significant difference between physical resources and implementation of learners' psychomotor activities in the public pre-primary schools' curriculum in Vihiga County.

H₀₃: There is no significant difference between parental participation and the implementation of learners' psychomotor activities in the public pre-primary schools' curriculum in Vihiga County.

H₀₄: There is no significant difference between the Policy factors and the implementation of learners' psychomotor activities in the public pre-primary schools' curriculum in Vihiga County.

1.6 Significance of the Study

The results of this study might be used to enlighten and advice parents concerning the importance of psychomotor activities on the learners' education in pre-primary schools.

The county government may use this to strengthen teaching and learning of the activity area in public pre-primary schools. The findings might be used by the Ministry of

Education (MOE) through Early Childhood Development and Education section of Kenya Institute of Curriculum Development (KICD) to improve the ECDE Curriculum nationally as well as national policies and by the international community, for example, UNICEF, and cited by scholars internationally in international journals, other publications and the website.

1.7 Limitations of the Study

Some respondents were unwilling to participate in the study for fear that the information given would be used against them. The researcher assured the respondents that this study was purely for academic purposes and that they had to conceal their identities in any of the tools used in the collection of data. The roads and weather conditions hindered easy movement through the rough terrain of Vihiga County especially during the rainy season when this study was conducted. This was mitigated by conducting the study during the early morning hours instead of the afternoon hours when the rain is most experienced. There was a fear of respondents sharing information during the process of filling in the questionnaire that might affect the objectivity of the findings. Nevertheless, the researcher sensitized the respondents to the importance of filling in the questionnaire honestly and independently. Some respondents felt that the researcher was conducting the study for financial gains but the researcher assured the respondents that the findings were purely for the improvement of the ECDE curriculum in the long run.

1.8 Scope of the Study

The research study focused on the factors that influence the implementation of the learners' psychomotor activities in the public pre-primary school curriculum in Vihiga County, Kenya. The study participants were public primary school head teachers and

public pre-primary school; teachers, parents, and the Sub County ECDE supervisors. This study was restricted to the public pre-primary schools that are within public primary schools. The study focused on the following selected factors; teacher factors, adequacy of the physical resources, parental participation, and ECDE policy factors. The questionnaire, focus group discussion guide, documentary analysis schedule, and observation guide were the four instruments used to collect, and aid in the data analysis.

1.9 Assumptions of the Study

The study was premised on the following assumptions:

- i. That teacher factors influence the implementation of learners' psychomotor activities in the public pre-primary schools' curriculum.
- ii. That physical resources influence the implementation of learners' psychomotor activities in the public pre-primary schools' curriculum.
- iii. That parental participation influence the implementation of learners' psychomotor activities in the public pre-primary schools' curriculum.
- iv. That policy factors influence the implementation of learners' psychomotor activities in the public pre-primary schools' curriculum.

1.10 Theoretical Framework

This study employed Maria Montessori's Theory on children's play (Montessori, 2012).

The theory was most preferred in this study because it indicates the pivotal role played by play facilities and materials, the immediate conducive environment for play, and the applicable teachers' methodological skills during play activities. The key component of this theory is based on the careful provision of the environment that is encouraging and motivating to the learners' anxiety, commitment, and curiosity during the teaching and

learning procedure (Lillard, 2013). When planning and designing play fields, it should be safe and appealing to the learner's curiosity. Careful considerations should be taken into account when planning for children's learning environment such as; hygiene, attractive play fields, safety, and aesthetics (beauty).

Montessori noted that play materials and equipment should be appropriate to the child's; size, age, gender, manipulation, and eye-catching. The children should be free to choose the type of materials and equipment they deem suitable for play. The materials and equipment should be attractive and clean. The child should be left to interact with the play materials and equipment for self-fulfillment and anxiety. Montessori adds that although children have the right to play with the materials and equipment, teachers should provide appropriate materials and equipment to them (Lillard, 2013). It is the teachers' role to plan and choose the most suitable time that children should be engaged during the play activities (Okoruwa, 2017).

Montessori philosophy is in agreement with school engagement in providing clean, safe, aesthetic, and adequate play facilities and materials. The train, experience, and application of suitable outdoor class approaches create a motivating effect on the children's participation during the teaching and learning process. The availability and adequacy of the learning resources enable the achievement of the cognitive, affective, and psychomotor skills and knowledge for the full potential of the young children's talents and abilities. This theory applies to the present study because the provision of adequate and relevant play materials, availability of trained and experienced teachers with the use of suitable methodological methods, effective parental participation in the education of their children, and clear policy on the play activity enhances the effective implementation

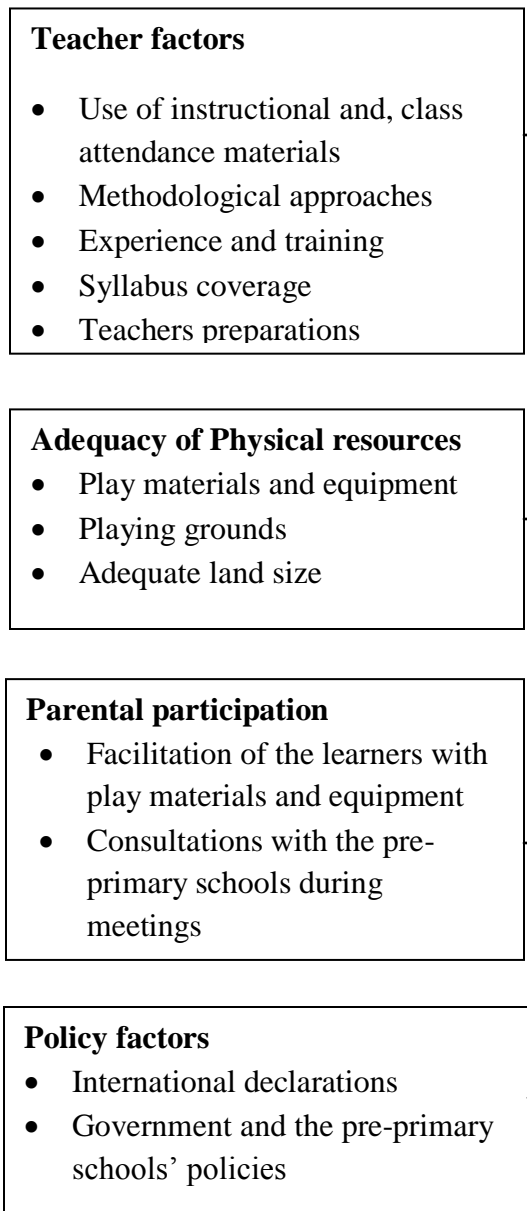
of the learner's psychomotor activities in the public pre-primary school curriculum. This results in the improved implementation of the learners' cognitive, affective, and psychomotor development in the public pre-primary school curriculum.

According to Montessori, teachers and parents should actively involve and assist their children with the provision, safety, and use of the physical resources for play activities (Fisher, K. Hirsh-Passek, Gollinkoff, Singer & Berk, 2011). Maria Montessori's Theory was deemed appropriate for this study because the independent variables; teacher factors, physical resources, parental participation, and policy factors are selected factors that ensure effective implementation of the learners' psychomotor activities in the public pre-primary school curriculum. Maria Montessori's Theory help to identify, nurture, and develop the learners' individual's talents and potentials through engagement in the psychomotor activities.

1.11 Conceptual Framework

In this study, the independent variable is selected factors while the dependent variable is the implementation of the learners' psychomotor activities in the public pre-primary school's curriculum. This is shown in Figure 1.2.

Independent variables



Dependent Variables

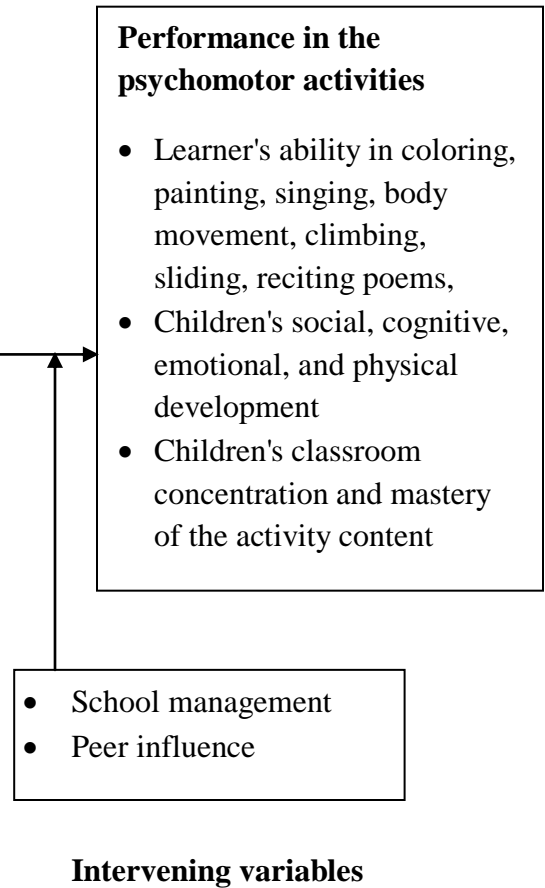


Figure 1.1: Conceptual framework

Figure 1.1 above is a diagrammatic representation of the study's conceptual framework indicating the relationship that exists between the independent variable and the dependent variable. The independent variable is the selected factors that were operationalized by; teacher factors, the adequacy of the physical resources, parental participation, and policy

factors (inputs). The manipulation of the independent variables results in the dependable variable that is the implementation of the learners' psychomotor activities in the public pre-primary curriculum (outputs). The components of the intervening variables are peer influence and pre-primary schools' management. The outputs were achieved after the various inputs undergo the educational production process.

The conceptual framework outlines the independent variables as teacher factors, adequacy of the physical resources, parental participation and policy-based factors that influence the dependent variable, implementation of the learners' psychomotor activities, and other learning activity areas in the curriculum.

Teacher-based factors are factors within the teacher that will lead to efficient delivery of the learning activity such as mastery of the activity content matter, application of effective methodological methods and skills, and relevant use of the equipment and instructional materials that translates to improved children's academic and socio-developmental outcomes. The adequacy of physical resources enables teachers and learners to be motivated to achieve the desired set targets. Parental participation involves the provision of the relevant resources and guiding and counseling to facilitate learners' acquisition of psychomotor skills. The policy factors include international declarations, and government and school policies. The intervening variables are; school management and children's peer influence that might affect the dependent variable either positively or negatively.

1.12 Definition of operational terms

Academic performance: refers to public preschoolers' cognitive achievement in outdoor/play activity and other related subject activity areas such as mathematics, languages, social studies, religion, and science.

Challenges: These difficulties, hindrances, or obstacles work against the smooth implementation of psychomotor activities among PP2 pre-primary school learners

Directed play: activities where the teacher demonstrates the creation of new games and activities that learners have no choice but to perform as demonstrated by the teacher.

Discrimination: unfair treatment of some preschool children than others when teaching and awarding scores in activity areas or subjects.

Dramatic play: It refers to children's playing the roles of other persons such as mothers, fathers, and other home siblings.

Free play: activities that children are engaged in out of their own free will or choice

Fixed play instruments; are instruments that are fixed permanently in a position where pre-school learners without movement use them for example; the seesaw swings, and climbing ladders.

Gender: It refers to either a male or female person or children

Implementation: this is the process of executing the ECDE curriculum and policy into practice

Monitoring: this is a continuous oversight of the ECDE pre-primary curriculum

Onlooker play: type of play where a child watches another child as they play and remains actively engaged though not physically. The child plays the role of a spectator

Outdoor play: these are pleasurable activities done outside classrooms most preferably in the school field or playground.

Physical resources: these include playgrounds, classrooms, play equipment and materials.

Public pre-primary school: these refer to two Years pre-school (ECDE) learners' education in an approved learning institution before proceeding to the primary level in Kenya.

Private pre-primary school: these are pre-school units that are not in public primary schools and whose management does not fall under the public pre-primary school management

Policy factors refers to both global and local child's rights and rules that governments and learning institutions should adapt to enable pre-school children to access free and compulsory ECDE education.

Psychomotor activities: These are outdoor activities that learners engage in that include; drama, music, rhymes, ball games, skipping ropes, and swings that also influence a child's indoor activities for cognitive, social, and physical development.

Public pre-primary school: these refer to two years of pre-school (ECDE) learners' education in an approved learning institution before proceeding to primary grade level in Kenya.

Public pre-primary school teacher: refers to the teacher employed in the public pre-primary schools that are hosted in the public primary schools' institutions.

Ritual play: a play where the child's interest moves from family to his or her peers

Stakeholders: this is a term used to refer to the general community that has a great interest in the learners' education in public pre-primary schools.

Selected factors: These are identified factors that enhance learners' implementation of the psychomotor activities.

Supervisors: are Sub County officers who advise on policy issues and ensure ECDE teachers effectively implement the pre-school curriculum including the psychomotor activities

Teacher factors refer to indoor and outdoor teacher methodological approaches applied by the teacher to enhance learners' academic performance and physical and social development.

Outdoor activities: The word is synonymous with play and Psychomotor activities that are conducted outside the class to break the monotony of indoor or classroom activities.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter gives details of objective-driven themes of the literature review. The first is a review of the teacher factors that influence the implementation of the learners' psychomotor activities in the curriculum. The second review rests on the influence of the physical resources that influence the implementation of the learners' psychomotor activities in the curriculum. The third review dwells on the parental participation that influences the implementation of the learners' psychomotor activities in the curriculum. The fourth review discusses the policy factors that influence the implementation of the learners' psychomotor activities in the curriculum. At the end of each sub-section, an integrated critique is given that opens gaps that the present study filled.

2.2 Overview of psychomotor activities on implementation of learners' psychomotor activities

Globally, play is considered an important activity in the education of pre-school children. Play is considered a key ingredient in a child's education and development. Some studies have associated play to initial or early skills in a child's preparation for learning (Christie & Roskos, 2015; Diamond, Barnett, Thomas & Munro, 2007; Bredekamp, 2004). The child's early development of science and mathematics skills, literacy and language skills, and societal and self-regulating skills were associated with play (Fisher, Golinkoff, Singer, Berk, & Hirsh-Pasek, 2011). During the early stages of preschool education, the major emphasis is on preparing the young children's readiness to learn in a new school

setting. Bredekamp (2004) notes that play corresponds with children's early school readiness skills. Studies showed that experience with play in the classroom has more advantages for children with limited self-regulatory skills (Diamond, Barnett, Thomas, & Munro, 2007). Thus, the incorporation of play into the early years of learning enables children to address the key tasks required by a preschool teacher. Play environment and play or outdoor activities encourage the children's performance in other activity areas such as language, mathematics, and science and eventually prompt the development of the young children's skills.

However, some differences arise on how to incorporate play into the classroom and outdoor teaching and learning, several techniques were proclaimed essential (Frost, Wortham, & Reifel, 2012). Further, Frost, Wortham and Reifl (2012) reported three techniques for incorporating play in the pre-primary curriculum: trust-in-play technique, facilitate-play technique, and learn-and-teach-through-play technique. These provide some curriculum models that teachers could attempt to incorporate play of each technique to the learners' implementation of the psychomotor activities.

Trust-in-play technique requires teachers to avail environment and play for autonomous flexible play (Frost, Wortham & Reifel, 2012). This is aimed at an assumption that plays results in a naturalistic manner in the absence of teachers. This encourages the health and social development of children. The facilitated-play technique stresses on teacher's guidance to encourage play activities. This aims to develop children's play capabilities in varied kinds of play such as hide and seek games that are considered essential for school performances (Bodrova & Leong, 2007). The teachers' role is to provide a conducive environment and guide to enhance interaction. The learn-and-teach technique only

focuses on how to use play to achieve the teaching and learning results. In this technique, the teacher guides learners on how to use play to achieve the stated activity skills such as literacy, numeracy, social development, and science. Christie & Roskos (2013) state that literacy skills can be obtained by using play materials that are appropriate to literacy behavior such as reading and writing skills. The adoption of the three techniques would encourage educational performance in all the activity areas of a preschool learner. However, the current study focused on selected factors that influence the learners' implementation of psychomotor activities in public pre-primary schools in the Kenyan context.

Dowdell, Gray and Malone (2011) established that play influenced the social behavior of learners. The authors further stated that natural environments had an advanced effect on learners' positive relationships with teachers and peers besides providing them with a diverse learning environment. Additionally, Greenfield (2004) posits that a natural play environment offered learners learning opportunities that are appropriate for risks taken through game activities. Tomporowski, Davis, Miller and Naglieri (2017) postulate that learners' psychomotor activities assist in improving the learners' functioning of the brain and cognitive development. Nevertheless, the reviewed study did not concentrate on how selected factors influence learners' implementation of the psychomotor activities in public pre-primary schools as in this study.

According to Perkins, Jacobs, Barber and Eccles, (2004), a learner's involvement in play activities is a pivotal predictor of young adults' involvement in sports, games, and physical development activities. Learners' play activities are associated with improved educational performance and high academic scores. Calbom (2012) postulate that play

activities are considered to correlate with cognitive skills, positive attitudes, learning concentration and attention, and acquisition of positive classroom behavior). Julia (2017) notes that both outdoor and indoor psychomotor activities contribute to and complement learners' competencies development. This means that both indoor and outdoor play activities should be treated equally to provide learners with enough opportunity in both environments.

Gichuba, Opatsa and Nguchu (2009) noted that play facilities and materials promote language development and socio-emotional skills, creative and manipulative skills, and physical growth. Learners pay attention to materials that are attractive and eye-catching (NACECE, 2000). Therefore, to promote learners' concentration and concept acquisition, play materials and facilities are essential. Gichuba, Opatsa and Nguchu (2009) identify outdoor play materials and facilities as mobile materials that include; play balls, toys, hoops, ropes, and rings while fixed play materials and facilities include; see-saws, slides, swings, and climbing frames. NACECE (2000) adds that the skill of sharing and talking is achieved through play activities.

Kiruki (2011) states that indoor play materials consist of classroom teaching and learning materials as used by both pre-school learners and teachers for an effective teaching process. Gichuba, Opatsa and Nguchu (2009), define play materials as books, dolls, drums, cutouts, cards, charts, dress utensils, and small colored blocks. Pre-primary schoolchildren are excited when they carry out, manipulate, and store these materials in their most convenient places. Play materials reinforce proficiency in concepts and skills taught. However, irrelevant and boring materials and equipment should be discarded for the learner's use and manipulation to promote psychomotor activities.

2.3 Teacher factors influencing implementation of learners' psychomotor activities

Research studies indicate that teachers play a key role in directing or guiding certain instructional goals and objectives for learners' education through play (Lillemyr & Ole-Fredrick, 2003). Goffin and Wilson (2003) assert that teachers have varied roles to support the integration of learner's play activities in the Early Childhood Development Education curriculum. Okoro (2004) noted that teachers play a vital role in determining the viability of any given educational system and its influence on the learners' performance. Oyewumi (2010) further claim that only a few wealthy institutions and parents have employed competent and committed qualified university graduates that correspond to learners' quality education but most public institutions have teachers with low qualifications coupled with minimal payments and remunerations. Such institutions with unqualified teachers cannot provide effective teaching and learning (Ajayi, 2008). This implies that teachers should be able to provide; play materials, structure play environment, model play, expose learners to play opportunities, and encourage good quality play. The above-reviewed studies did not focus on how selected factors influence the implementation of learners' psychomotor activities in the public pre-primary schools in Kenya.

Friedrich Froebel, a German Educator, developed an idea of natural unfolding choosing the word 'Kindergarten' for his school because of his comparison (Elkind, 2007). To Froebel, kindergarten teachers were called kindergarteners because Froebel valued the importance of the early years in a child's life. The teacher was responsible for cultivating and nurturing the child and based the curriculum on the idea of play. He believed in the value of play whereas others saw it primarily as foolishness - a tool of the devil

(Heckman & Maesteou, 2014). Play gives joy, freedom, contentment inner and outer rest, and peace with the world therefore designed three basic elements for his curriculum: gifts, occupations, and mother play. In this study, play is meant for pleasurable experiences as well as cognition. Nonetheless, the current study sought to investigate the selected factors that influence the implementation of psychomotor activities in Vihiga County, Kenya.

In Britain, Saide (2009) studied the teacher's role in children's literature-related play and recommended that teachers should act as role models and guide in the process of teaching and learning through literacy-related play for effective curriculum implementation in early childhood centers. Though the study employed a descriptive survey study design, it involved 69 teachers and 120 school children yet, this study involved the use of the pre-primary school head teachers, 33 pre-primary school teachers, and 12 Early Childhood Development Education supervisors. Besides, the present study used a focus group discussion guide, observations schedule, questionnaire and document analysis schedule to collect data for the findings of the study.

According to Social Learning Theory, Heckman and Maesteou (2014) observed that children learn by observing and imitating models and their model in play is the teacher. Therefore, the teacher, in terms of play, can be imitated and modeled. Most preschool colleges in the United States and other Western Countries traditionally have followed a child-centered philosophy stressing social and emotional growth in line with young children's developmental needs (Bredenkamp, 2004). Some colleges such as those based on the theories of Piaget or the Italian educator Maria Montessori have a stronger cognitive emphasis. In the US pressures have grown to offer pre-school teacher training

instruction on basic academic skills, academically oriented programs neglect young children's need for exploration and free play, and too much teacher-initiated instruction may stifle their interests and interfere with self-initiated learning (Elkind, 2007). The present study differs from the cited study because it focused on the influence of teacher factors on the implementation of learners' psychomotor activities in public pre-primary schools.

According to the US Bureau of Labor Statistics (BLS), more employers are preferring to hire preschool teachers who have completed certificate courses or associate degree programs (Elkind, 2007). Formal ECE Education programs emphasize the incorporation of play with learning to have children's motor skills and language development, emotional and social aspects encouraged. USAID (2013) summarizes teacher's factors by noting that teacher's attitudes are important toward the learners' active participation in the play activities. It is important that the learner feel welcome, appreciated, and an important member of the class. Nevertheless, the reviewed study was conducted in a more developed nation on how teachers' attitudes influence preschool educational outcomes in contrast to this study that was conducted in a developing nation, Kenya.

Niklas and Pramling's (2008) conducted a study in Sweden on how to integrate storytelling activities in motivating preschool learners during the teaching of mathematics activities. The study found out that the acquisition of mathematics concepts is best enhanced through storytelling play activities. Whereas the aforementioned study was conducted in a developed nation, Sweden the present study was conducted in a developing nation, Kenya. Still, the mentioned study used an experimental design based and the use of a questionnaire as the instrument to collect data in contrast to the present

study that was conducted in Kenya, which adopted a mixed method design and used a questionnaire, observation schedule, and focused group discussion guide as the instruments to collect data.

Saracho and Olivia (2001) conducted a study in the USA on teachers' perceptions in promoting literacy among Spanish-speaking learners using play activities. The study established that teachers who adopted play activities during lesson presentation enabled learners to comprehend the language acquisition faster than those who did not use play activities. Though the study was rich in methodology, it, however, had a limited sample size of 40 teachers, unlike the current study, which had a large sample size of 205 participants. The reviewed literature was conducted in an advanced nation, the USA while the present study was conducted in a more developing nation, lesson planning at the K-5 elementary level revealed that 50% of teachers did not plan for outdoor play activities and that 42% of teachers did not use play during classroom Kenya. The current study intended to bridge this gap.

In USA, Speedlin (2010) study on teachers' preparation of lesson presentation established that teachers lack of adequate lesson presentation results in detrimental learner's acquisition of the basic educational targets in preschools. Gordon and Browne (2004) report that teachers are key facilitators of outdoor play activities. However, South Africa, asserts that 71% of teachers who allow learners to pursue their own choice of play activities enable students to succeed in academic attainment (Imenda, 2012) due to practical and actual learning of the concepts required for preschool education.

Olabode (2012) carried out a study in Nigeria on the effect of teachers' experience and use of technology on secondary school students' performance in physics. The findings confirmed that high students' scores in the examination were associated with long and experienced teachers unlike those with limited teaching experience. The findings indicated that students obtained high examination scores in physics when taught by experienced and professionally trained teachers. This implies that teacher experience has a positive impact on students' academic performance. However, the current study investigated the teaching experience of using play activities on pre-primary school learners' implementation of the psychomotor activities in Vihiga County, Kenya.

In Nigeria, Salami and Oyaremi (2012) investigated teachers' characteristics on the use of play in learners' education in pre-primary and primary schools. The findings revealed that the use of play, songs, and rhymes made teaching and learning of foreign languages more simplified for teachers' effectiveness and learners' understanding. However, this study investigated the teacher factors that influence learners' implementation of the psychomotor activities in public pre-primary schools in Vihiga County, Kenya.

Subilaga (2017) conducted a study that intended to explore the role of play on preschool learners' education in Tanzania. The study was based on a multi-case qualitative research design. The main purpose of the study was to establish how teachers understand play activities and state their role in learner achievement and how it is infused into the teaching and learning process. The study used an interview schedule and observation guide to collect data from 3 primary school head teachers and 5 teachers in 4 schools. The findings of the study indicated that play activities when well utilized by teachers motivate learners. However, the author established that play did not directly enhance

learners' cognitive domain. It was further established that overcrowded classrooms, parents' demand for pupils' academic scores, over-emphasis on an examination-oriented system of education, and teachers' incompetence were some of the factors that inhibit classroom play activities. Nonetheless, the present study used the questionnaire, interview schedule, and observation guide to collect and triangulate data in contrast to the reviewed study, which had an interview schedule, and observation guide as the only instrument to gather data. Whereas the reviewed study adopted the multi-case qualitative research design, the current study used a mixed method design of both qualitative and quantitative paradigms. Whereas the reviewed study used a limited sample of 8 participants, the current study embraced a large sample size of 78 participants. However, the current study was conducted in Kenya while the reviewed study was conducted in Tanzania, a gap this study intended to fill.

Johnas (2013) conducted a study on how teachers utilize play activities in teaching pre-primary school learners in Tanzania. The study made use of Maehr's Personal Investment Theory and descriptive design. A sample of 30 teachers out of the target population of 86 teachers constituted the participants of the study. Teachers' questionnaires and an observation guide were the only tools used to collect data. The relationship between the variables was determined by Chi-Square at a level of significance of 0.05 ($p < 0.05$). The findings indicated that 58% of teachers used play as a teaching strategy in contrast to 42% that ignored the use of play. Though the methodology used in the study was adequate, it, however, was limited by the use of two instruments; a questionnaire and observation guide, and a sample size of 36 respondents as opposed to the present study which used three instruments; a questionnaire, focus group discussion guide and

observation schedule with a large sample of 205 respectively. The current study used the mixed method design and Maria Montessori's theory as opposed to the reviewed study. The present study was destined to fill this relationship gap.

Johnas (2013) postulate that inexperienced teachers are likely to inhibit effective teaching and learning in the ECDE centers. In contrast, Lyabwene (2010) indicated that not only do the professionally qualified teachers influence the effectiveness of the ECDE classroom teaching and learning but the abundance of school resources and physical appearance play a great role in the learners' educational performance. It should be noted that the teacher's competency is an inward feeling and determines one's commitment to achieving educational goals.

A study by Tarimo (2013) in Tanzania on the strategies adopted by teachers and their influence on play activities established that many public pre-schools had inadequate and dilapidated play materials to enable teachers to achieve their teaching targets as opposed to those in privately owned pre-schools. The study further established that teachers' motivation and training influenced the quality of teaching of play activities. The mentioned study only used a questionnaire and observation schedule to collect and aid in data analysis as opposed to this study, which adapted a questionnaire, focused group discussion guide, and observation guide to collect data. Similarly, the present study was conducted in public pre-schools, unlike the reviewed study that was conducted in both private and public pre-primary schools a gap this study intended to fill.

Teachers' use of play can greatly provide the requisite motivation via play to develop preschool learners' talents if and only if they apply appropriate acquired training and

experience. A study by Gumo (2003) on the school-based factors affecting the teaching of Art and Craft among preschool children established a significant positive correlation between teaching experience and children's Art and Craft scores. Thus, the teachers' experience is a key determinant factor in the implementation of effective play activities and mitigates any arising difficulties. However, the present focused on the influence of the teacher factors on the learners' implementation of psychomotor activities in the public pre-primary school curriculum in Kenya.

Kerichi (2015) conducted a study on the adequacy and appropriateness of play environment for the ECDE physically challenged learners in Kenya. The study concluded that though trained and qualified teachers handled the learners, the play facilities and materials were; inadequate and inappropriate for use by physically challenged learners. The respondents were purposively selected from 20 ECDE centers. The study participants were head teachers and teachers. An interview, observation guide, and documentary checklist were used in the data collection. The reviewed study was conducted in an urban setting and only adapted the purposive sampling technique on the physically challenged learners, unlike the current study that was carried out in a rural setting, conducted on the learners without physical challenges and used both the purposive, stratified, census and simple random sampling methods. The current study used a sample of 78 respondents while the reviewed study used an undefined sample size.

In Uganda, most preschool training incorporates ideas by early philosophers like Froebel and Italian Maria Montessori (UNESCO, 2011). In a study conducted in 1997 at Jinja involving seventy respondents who were purposively sampled as they met the criteria required by the researcher, that is, trained for two years, the teacher training period is

insufficient. The questionnaire was the main tool of the study as all the respondents were literate and could therefore understand the questionnaire items. Also recommended was the need to incorporate more practical play activities in teacher training. This study was similar to that conducted in Jinja by UNESCO (2011) in that the questionnaire was the main tool for collecting data. Whereas the UNESCO (2011) study had 70 respondents, this study in Vihiga County had 88 respondents who participated in this study, and Focus Group Discussions, interviews, and observations were the instruments used to collect data in Hamisi Sub-County, Vihiga.

In Western Uganda, large class size and external threats and society values, cultural beliefs, and successive legal complexity (Staempfli, 2009) are the main cause of teachers' inability to facilitate outdoor play activities. However, the use of safe playing grounds with a clear policy on the effectiveness of psychomotor activities can be mitigation of these factors. Teachers can have self-confidence and effective learner's familiarity with psychomotor activities when other options have been put in place to limit such fears. This risk of reluctant culture (Furedi, 2002; Humberstone & Stan, 2009) is likely to impede teachers' application of play activities that are beneficial to learners. The psychomotor activities that are generally conducted outside the classroom are associated with the physical learning and developmental growth of learners (Ernst, 2013).

Similarly, a study by Nannyonjo (2007) on the determinants that influence learning performance in Uganda established that teachers' characteristics that result in the learners' outcomes include; teachers' qualifications and age, teachers' in-service courses, chronological age, teaching strategies, teachers' qualifications and experience, school evaluation strategies, and school administrative effectiveness. Similarly, Ayiemo,

Mwoma and Ouko, (2019) conducted a study on the teachers' role in the academic outcomes in Nyanza Province. The study noted that the learners' outcomes are entirely dependent on the teachers' role in the classroom management, curriculum implementation, curriculum planning, and instructional program that are likely to improve the learners' educational outcomes. Thus, the learner's outcome in examinations is significantly related to the teachers' performance. However, the present study investigated the teacher's factors that influence the learners' implementation of psychomotor activities in the pre-primary school curriculum in Vihiga County.

Ochanda (2015) noted that most teachers did not supervise the psychomotor play activities. Achieng (2010) asserts that most teachers lay much more emphasis on indoor academic activities than psychomotor play activities. Lillian (2010) opine that outdoor play activities were a waste of the learners' time and the teachers concentrated more on the learners' academic attainment. Nevertheless, this study focused on how play activities influence the learners' implementation of psychomotor skills in the pre-primary school curriculum.

A study carried out by Ng'asike (2004) on the use of play by mathematics teachers established that the teachers training enabled them to provide child-centered pedagogical methods that enhanced high scores in examinations. On the contrary, the above-mentioned study indicated that only 10% of the teachers in Kasarani Sub Count, Nairobi County, in Kenya made use of play as a strategy when teaching pre-primary school mathematics activities despite their formal training. The use of the teachers' ineffective methodological approaches is the cause of learners' detrimental performance in mathematics. However, the present study focused on the teacher factors influencing

learners' implementation of the psychomotor activities in the pre-primary school curriculum while the quoted study centered on the mathematics teacher's pedagogical approaches to the improvement of the learners' examination performances.

The ability of Kenya teachers to enhance the teamwork and peer support for learners with or without special needs is crucial (Ochieng, Kisimbi & Saidi, 2018 & Wango, 2009). As administrators, teachers cannot please everyone but must strive to enhance the play activities. There are many barriers to the teacher's use of physical activities. However, teachers' initiative to discuss and consult with others on the strategies of minimizing the barriers to physical play activities is important. However, studied by Wango (2009) and Mbithi (2017) note that each subject activity area is important and should be implemented taught as stipulated in the syllabus. According to UNICEF (2009), the teachers' capacity to network with the other stakeholders and experts on the issues that would impact positively on play and inclusive education is important.

A study conducted by Njoroge (2011) in Thogoto and Karai Zones in Kikuyu Division, titled factors influencing children's enrolment in pre-school education mentioned the role of preschool teachers as one of the major factors influencing enrolment. Nevertheless, the present study focused on teachers' factors that influence learners' psychomotor activities. Still, the aforementioned study was conducted in a small area compared to this study that was conducted in a County.

Mwisukha, Muhalia and Gitonga (2013) conducted a study titled 'Extent of Public Support for Physical Education in Kenya'. The respondents were Kenyatta University students in Kenya. An exploratory survey design was adopted for that study. The findings

indicated that a large proportion of the respondents 137 agreed that the use of physical education was more important in the learners' education compared to another respondent 37 who provided a contrary response. To determine whether there was any significant difference in the perceptions of the respondents on whether Physical Education (PE) enjoys equal status with the other academic subjects, 141 respondents supported this position while 14 responded that the use of physical education was not an important subject as other academic subjects. While the above-reviewed study adopted an exploratory research design, the current study adopted the concurrent triangulation method. The respondents were mature university students while the majority of the respondents in this study were the ECDE pre-primary 2 teachers, head teachers, and the Sub County pre-primary school supervisors. Whereas Mwisukha's (2013) study used the questionnaire as the only tool for data collection, this study adopted a questionnaire, observation schedule, and focus group discussion guide to collecting data.

Ojuondo (2015) conducted a study to establish the features of play that promote the development of the learners' language skills in Kisumu County, Kenya. The objectives of the study were centered on kinds of play, accessibility of play materials and equipment, teachers' role during play, and the school's policy formulation as the play factors that affect the learners' development of language skills. The purposive sampling technique was adopted to select a sample of 143 respondents. The data were analyzed using the descriptive design. The findings revealed that the learners exposed to the play activities such as writing, creative, dramatic, manipulative, and physical plays attained higher scores in the skills of writing, speaking, listening, and reading in contrast to those learners who did not use the play activities. Despite the reviewed study having a rich

methodology, it was limited in the use of only purposive sampling techniques, unlike the current study that used purposive, stratified, census, and simple random sampling techniques. Likewise, the present study used both descriptive and inferential statistics, unlike the reviewed study, which only used descriptive statistics analysis. Therefore, the present study tried to bridge this gap in methodological procedures.

A study by Njoroge (2011) pointed out that the role of teachers is highly influenced by teachers' training, attitude, motivation, and remuneration. The study sample comprised 3 head teachers, 6 teachers, and 6 parents. However, the present study had a large sample size of 12 Sub County ECDE supervisors, 10 parents, 33 head teachers, and 33 pre-primary school teachers that informed that bridged the relationship gap.

Wangare (2010) in a study titled; factors hindering the use of play in Makadara District, Nairobi Kenya. The study had a population of 2608 preschool children and 180 preschool teachers. The sample size for the stud was 300 preschool children and 18 teachers. The study used a questionnaire as the only tool used to collect data. The study established that some of the teachers used the play activities as punishment for the wrongdoing among the learners. The author posits that this kind of punishment instills fear, anxiety, resentment, and hostility among school children and the vice should therefore be avoided. Whereas Wangare (2010) used only one tool to collect data, this study used three tools to collect data namely; questionnaire, observation schedule, and focus group discussion guide. This study was conducted in Vihiga County that is predominantly a rural area in contrast to the reviewed study that was conducted in an urban populated area in Nairobi. Nevertheless, the present study investigated selected factors influencing the implementation of the

learners' psychomotor activities in the pre-primary school curriculum in Vihiga County, Kenya.

Obuchere (2011) investigated the factors influencing the implementation of the ECDE curriculum in Emuhaya Sub County. The study mainly focused on the teacher factors that enhance the use of play activities in preschool centers. The study had a sample size of 65 teachers and 1 DICECE officer. However, the quoted study differs from this study in several ways. First, this study focused on the teacher, factors, physical resources factors, parental participation factors, and policy factors that influence the implementation of the learners' psychomotor activities in the pre-primary school curriculum in Vihiga County. Secondly, this study had a large sample size of 78 participants. These are the gaps that this study sought to fill.

2.4 Physical resources influencing implementation of learners' psychomotor activities

For Early Childhood Development Education to realize successful education, the provision of adequate and quality learning facilities and materials is necessary. Boakye-Boaten (2015) notes that quality materials and facilities form the pivotal determinant factor of the preschool's teaching and learning environments. According to Hailu & Biyabeyen (2014) equipment, infrastructure, and indoor and outdoor facilities and materials are the keys to the effective facilitation of teaching and learning. A conducive learning environment leads to better academic performance by the learners (Wangari, 2010). Teaching and learning facilities are therefore the basic ingredients for the smooth implementation of the ECDE curriculum. The failure or success of any academic program depends on the unavailability and availability of instructional materials and

facilities. Khan and Iqbal (2012) established that the school infrastructure, physical facilities, and materials facilitate effective teaching and learning process in pre-schools.

Ahmed (2003) indicated that most schools had uncomfortable play environments with a lack of basic facilities and materials. Other studies note that the play facilities and materials are of great benefit to the children's early life (Hammond, 2019; KICD, 2008). Similarly, Jenson and Bullard (2002) indicate that most children depend on play materials encompassing; ropes, beanbags, balls, and hoops for playing. The children's development of gross motor skills and social interaction are key to the children's early exposure to the play materials (Fromberg, 2002). It is thus noted that most schools do not provide a quality education because of much emphasis on the cognitive domain rather than the affective and psychomotor domains that are equally important in young children's societal development. It seems that most pre-primary schools do not appreciate the role played by children's play activities in nurturing their talents, psychomotor skills, and societal development.

The school play materials and equipment should be attractive to the learners to increase their enthusiasm to participate more in the play activities. The high-quality playing materials enable the learners to be exposed to new experiences (Bernard Van Leer Foundations, 2002). According to the Health Council of the Netherlands (2004), preschool children require more challenging, complex, and diversified playgrounds for both girls and boys to participate in the play activities. The play environments have an advanced influence on the children's behavior. Greenfield (2004) confirm that play facilities and materials encourage and provide challenges to the children's experiences whenever they play. When the children play, they acquire social interaction skills,

physical abilities and skills, cultural rules, and communication skills. The pre-primary school learners admire play fields that enhance peer playing and game opportunities (Strader & Elisabeth, 2015). Similarly, Little and Eager (2010) assert that the provision of playgrounds and materials enhances children's application and understanding of the skills in daily life. Therefore, the play materials and facilities capture the children's curiosity and interest in interactions.

Meckinson (2014) explored the impact of outdoor psychomotor play activities on the learners learning and creativity. The findings established that adventure play activities encourage pre-primary school children's creativity and learning. The study recommends to pre-primary school institutions encourage adventure outdoor activities through the teachers and parents in enhancing effective children's learning capabilities and creative thinking. Nevertheless, this study focused on selected factors influencing the implementation of psychomotor activities in the pre-primary school curriculum in Vihiga County.

Play fields that are not challenging and attractive do not enhance learners' participation in psychomotor activities (Veitch, Salmon & Ball, 2008). The aesthetic and attractive playgrounds allow the learners active involvement in outdoor activities more than those playfields that are not attractive. Dymont (2005) noted that an ideal environment that has varied determinants for the play activities builds the learners' social interactions, mental or cognitive development, and physical development.

Hyyonena, Jarvelaa, Maattaa, Mykkanena and Kurki (2014) assert that children learning experiences should be taught through a combination of role-play, drama, music,

activities, art and craft, sculpting, smiles, and stories. The techniques allow learners to freely express their own experiences through ideas and thoughts. Psychomotor activity learning through music, art, and crafts among others is perceived to be a stimulating reality (Crumly, 2014). To make the classroom teaching and learning to affects the children's capability, it must be more real, stimulating, and natural (Beard & Wilson, 2002). Additionally, Ahunanya and Ubabudu (2006) assert that the availability of play facilities and equipment is essential for the teachers' effective teaching and learning process. These methods are instruments invented to enhance the understanding of the learners during the acquisition of psychomotor skills. The above-quoted scholarly views show that the learner-centered techniques are essential for the learning of psychomotor activities at the public pre-primary school level. However, this study investigated the overall teacher factors the influence implementation of the learners' psychomotor activities in the public pre-primary school curriculum in Vihiga County, Kenya.

A study conducted by Ekundayo (2018) in Nigeria investigated the relationship that existed between the availability of school learning facilities and the students' outcomes in the affective and psychomotor domains of the learning activities. The descriptive research design was adopted for the study. The sample consisted of 1200 secondary school students. The study used simple and stratified sampling techniques. The instrument to collect the data was the students' questionnaire. The study established that there was a significant positive relationship between the students' performance in both the affective and psychomotor domains and the students' academic attainments. However, the study (Ekundayo, 2018) was limited in regards to the use of one instrument, the participants, and the sampling techniques when compared to this study

which used four instruments, the sampling techniques were; purposive, stratified, and simple random sampling. The reviewed study did not investigate the effect of play activities on the learners' performance, a gap this study tried to fill.

Johnas (2013) conducted a study in Tanzania on teachers use of play as a teaching strategy in pre-primary schools found that most of the pre-primary schools had inadequate play materials and facilities for teaching and learning procedures. The author observed that the adequacy of the play facilities and materials were inadequate, inappropriate, and dilapidated. This implies that inadequate and the non-provision of the play resources cause teachers' dissatisfaction that leads to the learners' detrimental academic performances.

The school learning environment and the resources used by the learners are essential for their mental, social, and physical development (Garcia, Pence & Evans, 2008). The play materials and equipment create opportunities to increase and strengthen the learners' skills and knowledge (Lilian, 2010). The preschool learning environment should be secure, stimulating, welcoming, and warm to encourage the whole child's growth and learning. Thus, the school is expected to provide an essential environment besides the play resources for the learners' achievements and development.

Wangila (2017) in a study entitled assessment of factors influencing the implementation of early childhood development and education policy in Bungoma County indicated that policy was a factor to consider in sourcing for the availability of resources, facilities, and materials enable teachers to provide solutions to educational problems. This study

differed with the present study in Vihiga County as this study also looked at parental factors unlike the Bungoma study.

Kinuthia (2009) in a study titled Determinants of preschool teachers' attitudes towards teaching in Thika Municipality, Kenya, opines that the type of school has an advanced effect on teachers' attitudes towards teaching. The author asserts that the learning environment and the school leadership of the school influence the teaching staff's attitude and necessitate them to act in a particular behavior towards task accomplishments. Thus, the school leadership should be able to provide a conducive teaching and learning environment for pre-primary school learners to realize their potential. However, the present study focused on selected factors influencing the implementation of the learners' psychomotor activities in the pre-primary schools' curriculum.

National Center for Early Childhood Education (NACECE, 2000) advocates for teacher's improvisation of locally available materials and equipment, that is, resources. The locally available materials are considered simple and are easily replaceable (Gichuba, Opatsa & Nguchu, 2009). These materials and equipment are considered cheaper, familiar to the learner and readily available in contrast to the commercial materials and equipment that are expensive, unfamiliar and not durable. Play materials are pivotal in motivating the learners, improving their imaginative skills, and supporting the child-centered approaches to the learning process.

A study carried out by Ochanda (2015) in Kenya on the influence of play equipment on preschool learner's education revealed that they were insufficient and not constantly maintained and repaired. The stratified random sampling technique was used to sample 9

schools that encompass 45 pupils, 18 teachers, and 9 head teachers that were selected to represent the entire population for the study. The interview schedule and the observation guide were used to collect the data. The stated reviewed study only used two instruments, was conducted in 9 schools, and used three categories of the respondents; teachers, head teachers, and pupils in contrast to the present study that used three instruments; questionnaire, interview schedule, and observation guide on the teachers, head teachers, pupils, and education supervisors as the respondents for the study.

A study by Kerich and Okioma (2015) in Kenya investigated the association between the availability of play facilities and the learner's academic performance in Kisumu County. The study established that most schools had adequate play fields and play materials. However, the study also revealed that more of the materials used in the schools were not suitable for the learners' cognitive abilities. To make the play activity more participative to the learners, the researcher recommended that the schools should provide adequate facilities and materials that are related to the learner's needs. Another study by Asaji (2013) on the role of playground facilities on preschool children's participation on outdoor play activities in Mombasa County, Kenya, established that the availability of play facilities and materials were the key determining factors to the learner's active involvement in psychomotor activities.

Macharia (2012) noted that 70% of the playgrounds in Naivasha Sub County, Nakuru County, Kenya, consisted of grassy and sandy play fields that inhibit the learner's active participation in outdoor activities, hence affecting their physical and cognitive development. This means that pre-primary schools do not have a conducive environment

to facilitate the learners' psychomotor activities and therefore a barrier to curriculum implementation to some extent.

In Kenya, preschool teacher training colleges incorporate teaching practice (Wachira, 2008). The teaching practice is a procedure in the teacher education program through which the student-teacher is provided with the opportunity to apply: the knowledge, skills, attitudes, and values acquired to the actual classroom experience for a fixed period under the tutelage of their lecturers and the school. The teaching practice is the core of the teacher education that one must undergo to successfully be certified as a professionally trained teacher. Before the teaching practice, the student teacher undergoes compulsory Micro-teaching. According to USAID (2013), microteaching was designed to develop the student and teacher's new skills and to improve the methodological approaches to the teaching process. The microteaching practice is organized and conducted in a specially selected environment over a very short period and involves only a small number of students. The microteaching practice lasts for a period of between 5-10 minutes and thereafter, the class proceeds for discussion to draw lessons related to effective instructional skills and knowledge (Ngaroga, 2006). The lesson presentation can be video-taped and observed by the student and teacher in the presence of the supervisor or tutors. According to the Kenya Institute of Curriculum Development (KICD), the Pre-primary School Diploma Training Course takes three years including one full term for teaching practice (KIE, 2008).

Empirical studies revealed that the children's manipulation of play materials and equipment has a significant positive correlation with the subject areas like mathematics, languages, religion, and social studies. Whereas a study conducted by Nath and Szücs

(2014) established a significant positive relationship between the play materials and mathematics performance, Ituaruchiu (2013) comparative study in Kajiado County, Kenya, indicated that the children's reading and writing skills are greatly improved with the use of the play equipment and materials available in the public pre-primary schools. The availability of adequate learning and play materials among learners with physical difficulties is likely to initiate the learners' effective teaching and learning and development. However, in Kenya, studies by Wamocho (2003), Kimosop (2002), and Kamere (2004) established that most special schools in Kenya experience a lack of adequate learning and play facilities and materials. However, these studies did not investigate selected factors influencing the implementation of the learners' psychomotor activities in the pre-primary school's curriculum in Vihiga County as in the present study.

Sitienei (2016) notes that the facilities that help to promote psychomotor activities should be; nearer the indoor classroom activities, should be accommodated in a spacious environment, and the playground should be level and safe, that is, free from harmful objects. The author (Sitienei, 2016) also adds that play materials such as tweeters, swings and climbers should adequately be provided to learners to facilitate the teaching and learning process. Further, studies by Kithungu (2019), Macharia (2012), and Thuku (2017) in their studies indicated that there was a correlation between the socio-emotional development of the children and the play facilities and equipment. However, the present study investigated selected factors influencing the implementation of learners' psychomotor activities in public pre-primary school curriculum in Vihiga County.

Simiyu and Wanjala (2019) conducted a study in Bungoma County. The study focused on parental involvement in early childhood education learner's socialization in pre-school

institutions. Simiyu and Wanjala (2019) in the study titled Instructional Resources availability and use in Early Childhood Education and Development centers in Bungoma County, Kenya, used an ex-post facto research design. The questionnaire and the observation schedules were the main tools used to collect data. Thirty parents constituted the sample size for the study. The findings of the study established that the education of the parents had a positive role in influencing children's choice of where they learn or the choice of the preschool that children attend. The study recommended the provision of a variety of play materials in pre-primary schools. Still, it was recommended that pre-primary school parents should support children's education as did the parents of Leggio Emilio in Northern Italy (Begi, 2012). The quoted study was limited in the study participants in contrast to this study that used head teachers and teachers. Similarly, this study used the descriptive survey design. Thus, the research design, sample size, and location of the study informed the gap that this study intended to fill.

Nguku (2015) conducted a study on how to play activity influences pupils' academic performance in Machakos County. The objectives of the study were the influence of play on; the types of materials, allocated time, and types of play on the pupils' academic performance. The study adopted Froebel's (1852) theory, a quasi-experimental research design. The questionnaire and the pupils' achievement tests were the two instruments used to collect data. The study established that; the time allocation, types of play materials, and role-playing were significantly related to the pupils' academic performance. The study recommended that the teachers' innovations and the use of locally available materials from the school environment should be strengthened rather than over-reliance on commercial play materials. Nevertheless, the methodology used in

the aforementioned study was a different design and theory in contrast to the present study that used mixed methods design and Maria Montessori's theory of play (Montessori, 2012) respectively. This study, therefore, intended to fill this relationship gap.

Studies establish that schools that provide play activities aid the learners in understanding the skills and content in other activity areas such as; mathematics, science, social studies, and languages (Bundi, 2012). The finding asserts that the preschool schools that use music and songs as play activities during the teaching and learning of mathematics lessons enable learners to improve their academic performance (Bundi, 2012). In addition, Ayaga (2018) noted that providing pre-school learners with play activities helps to promote their performance of the other activity areas. Nonetheless, this study investigated the influence of physical resources on the implementation of the learners' psychomotor activities in public pre-primary schools hence, a gap for that existed between these studies.

2.5 Parental participation influencing implementation of learners' psychomotor activities

Parental participation in children's psychomotor activities in the provision of the home environment for the school-going learners' is more essential than the cultural background, education level, or family's income (Bokhorst-Heng, 2008). However, most parents are not familiar with how to inculcate, develop and create psychomotor skills in their children's education. According to Taneri (2012), parents who dismiss the learners' psychomotor activities do not relate well with the teachers to promote it. The development of psychomotor activities requires parental skills and knowledge. Thus, pre-

primary schools should involve parents with the awareness and informing the importance of creative activities, and provide the appropriate home environment for the improvement of creative skills. Research has been done on the role education plays in the provision of creative activities, and the interaction between teachers and parents but very limited research has been conducted on the influence of parental participation on the promotion of the learners' psychomotor activities. Thus, this study intended to fill this gap by investigating how the parents influence the learners' psychomotor activities in the public pre-primary school curriculum.

The parents of the achieving children create an environment for learning. They provide a place for study and to keep supplies, they set times for meals, sleep, and homework and they monitor how much time their children take to watch television, and what their children do after school (Papalia, Gross & Feldman, 2008). The study conducted in Boston, United States, showed that parents show interest in their children's lives by talking to them about school and being involved in school activities including outdoor play activities. This study in Boston purposively sampled households with school-going children where interviews were the main tools for collecting data. The study involved 77 third and fourth grades. The study found out that those children who were intrinsically interested in physical activities did better in school performance as opposed to those who mainly sought their parent's approval. The parenting styles do affect the children's motivation to play and learn. A study by Glasgow, Dornbusch, and Rites (2010) revealed that the highest-achieving fifth grader children had authoritative parents who ensured that their children did their homework, and were thoroughly supervised closely.

In a study conducted by Papalia, Gross and Feldman (2003) in the USA, the pre-primary school children who considered their parents as not authoritative were more likely, than their peers, to attribute the poor grades in preschool performance to external causes but to the low ability rather than to their efforts. The study was conducted in six preschools in California and three schools in Wisconsin states. The total sample size used was 2353 preschoolers in the two states of the USA. The findings about the authoritative parenting style do not seem to hold belief among some of the ethnic and cultural groups. In another study that used the achievement tests, the Latin and African American students – even those with authoritative parents - did not perform as well as the white students apparently because of the lack of peer support for greater achievement (Papalia, Gross and Feldman, 2003). Among some ethnic groups, their parents' parenting styles may be less important than the other factors that affect the learners' motivation to perform better. The strong school achievement of the many first- and second-generation youngsters from immigrant backgrounds – not only Asian but also Filipino and Mexicans–reflects their families and friends' strong emphasis on and support of educational success (Fuligni, 2009).

The participation of the parents in the children's educational performance is greatly enhanced through the psychomotor activities in schools (Erdem, 2018). Similarly, the parents play an important role in increasing their children's psychomotor activities through peer cooperation, teamwork, and self-esteem, which are equally crucial in the parent-child relationship. Erdem (2018) further asserts that children feel secure and proud of their performance when their parents are actively participating in psychomotor activities. Thus, the children greatly benefit from the conducive environments provided

by their parents through improved cognitive, mental, and psychological skills for the children to future adulthood.

Jayatilaka (2010) noted that parents possess limited knowledge about suitable home environments, play materials and equipment, and parent-children interaction on children's creative skills and abilities. The parents need to realize that learners' education not only occurs in the classroom but can take place in areas such as in the street, at home and in shopping centers. Thus, parents should note that different environments and situations could be ideal for their children to learn. The interaction between parents and teachers greatly influence the effective educational environment (Sabancı, 2009) and learners' outcome (Coleman, 2009; Esa, Razzaq, Yasak, & Omar, 2010). Besides, the active participation of parents in the education of their children enhances improved educational achievement (Yan & Lin, 2005). As such, the parents should realize how to develop and nurture their children's psychomotor skills.

According to Venetsanou and Kambas (2010) the educators, parents, and teachers should provide an appropriate learning environment through consultations and mutual agreement. Thus, it is important to provide opportunities for learners to experience different psychomotor activities in an appropriate environment, with adequate materials and equipment to cater to the learner's individual needs and characteristics and educational achievement.

Children should be accorded an opportunity to explore divergent thoughts. Similarly, they should be encouraged to seek different alternative routes to a remarkable solution and more than one solution to a problem. Nevertheless, Phu (2019) and Kupers,

Lehmann-Wermser, McPherson and Geert. (2019) argue that parents should not reward children for the acquisition of psychomotor skills. The authors argue that rewarding children interferes with the acquisition of psychomotor skills, reducing the children's responses and diverse thoughts. Therefore, children should be allowed to inculcate their mastery of psychomotor skills for their motivation rather than parents motivating them with incentives and rewards.

Accordingly, Phu (2019) highlights the issues related to enhancing the acquisition of psychomotor skills through children's play, pre-primary education, and parents' role in fostering children's creative skills. Similarly, the influence of parents on children's psychomotor activities in the pre-primary educational curriculum has been discussed. The findings of the study established the role played by the parents in nurturing learners' psychomotor activities through the play between the ages of 5-7 years. Phu (2019) further posits that psychomotor activities are not inherent characteristics because, through an appropriate environment, children could be nurtured and develop.

Further, Phu (2019) noted that creative education and play are synonymous with children's psychomotor activities both at school and at home. Creative activities play a critical role in skills such as problem solving, analyzing, and, inquiry (Taneri, 2012). The psychomotor activities play a major role in the children's imagination through feelings (Kupers, Lebmann-Wermser, McPherson & Geert, 2019). Psychomotor activities include; dancing, singing, playing instruments, acting, painting, and, poetry writing. Psychomotor activities engage the learner wholly both physically, emotionally, socially, and intellectually.

Bodrova and Leong (2015) affirm that most parents do not control their children at home for the implementation of psychomotor skills due to the habit of the children watching the television, videos, and playing with computer devices. Most children interact with play materials that are not suitable for enhancing imaginations and holistic development (Bodrova & Leong, 2015). Most parents do not provide their children with opportunities for psychomotor activities. This implies that the parents prefer to provide time for academic-oriented activities rather than psychomotor activity engagement.

Wilson (2000) asserts that most parents fear for their children's safety, attacks by diseases, and pollution that hampers children's engagement in outdoor psychomotor activities. Still, Gandhi (2000) asserts that many parents enroll their children in pre-primary schools with the notion that their academic drills prepare them for their future career choice and progression. Therefore, parents prefer their children not to engage in play activities that are meant for psychomotor skills. Teachers and daycare providers are constantly reluctant in providing psychomotor skills to pre-primary school children as a result of pressure from their parents (Mabagala & Libent, 2019). Thus, parents, community, and other related stakeholders should create an environment in which children should fully engage in the acquisition of psychomotor skills.

Omenogor and Warebi (2020) conducted a study on influence of design on children's role-playing in the pre-school education centers, in Nigeria. Data was collected by the use of the internet. The findings indicated that the parents should be encouraged to consider role-play as an important tool for enhancing psychomotor skills, which are pertinent for a healthy childhood. Thus, parents should provide an environment that helps to develop the children's psychomotor skills such as racing, building climbing, and football.

Nevertheless, the quoted study focused on how play activities influence children's health development in Nigeria as opposed to the current study that was conducted to establish how parental participation influences learners' psychomotor activities in the pre-primary school curriculum in Kenya, a gap that informed the present study.

In Tanzania, Mwamwenda (2014) reports that parents are more concerned with the academic achievement of their children than the psychomotor attributes. In a study in Arusha, Tanzania, twenty parents who had children in pre-primary schools were purposively sampled. The questionnaire was the main tool used in the study to collect data. In Tanzania, teaching and learning lay a lot of emphasis on Kiswahili literacy. To excel in English and other academic-oriented activities parents felt teachers wasted a lot of time on play and other outdoor activities at the expense of academic excellence. However, the presented study focused on how parental participation influences the learners' implementation of psychomotor activities in the public preprimary schools in Vihiga County, Kenya.

Kipkemei (2012) conducted a study on the role of parents on pre-primary school children's acquisition of socio-emotional skills in Langata Sub County, Kenya. The main objectives of the study focused on the role of parents in examining the quality of time, provision of appropriate materials, provision of space, and effect of parenting styles on the pre-primary schoolchildren's acquisition of social skills. Purposive and stratified sampling techniques were used to sample 2030 participants from a target population of 4703. The study adopted two instruments that were interview schedule for the parents and an observation schedule. The findings established that the parents play a minimal role in ensuring children's acquisition of the social skills that are also pertinent in the holistic

development of the child. Nevertheless, the quoted study focused on the parental role in the acquisition of knowledge and social skills in the urban locale but the current study concentrated on the role of parents in the acquisition of psychomotor activities in both urban and rural locales, a gap that the present study intended to investigate.

Akoth (2016) carried out a study on the influence of play activities on pre-primary school children's psychomotor activities outside the classroom in Langata Sub County, Kenya. The findings revealed that most private pre-primary schools had adequate facilities and equipment for the children's acquisition of psychomotor activities. On contrary, the findings established limited or none of the play equipment and materials despite having inadequate playgrounds. The finding established the provision of a safe environment, and adequate equipment and materials provided by the parents to enhance the implementation of the learners' psychomotor activities in the pre-primary school curriculum. The finding reveals a relationship gap between parental support of the psychomotor materials and equipment between the private and public pre-primary schools in promoting learners' psychomotor activities for the implementation of the curriculum.

A study by Musila (2015) conducted a study on the school factors influencing the provision of the child-friendly school program in the public primary schools in Kangundo Sub County, Kenya. The study only used questionnaires and focused group discussions to collect data. The findings of the study revealed that the psychomotor skill development of the children was dependent on parental participation through guiding and counseling in the education of the pre-primary school learners. However, the quoted study established the school factors enhancing the child-friendly schools in the public primary schools while the present study focused on the role of the parents in the implementation of the

learners' psychomotor activities in the public pre-primary school curriculum in Vihiga County, Kenya.

Andiema (2020) conducted a study on the influence of child-centered pedagogy on the teaching and learning of psychomotor and creative activities in public pre-primary schools in West Pokot County, Kenya. The inferential analysis of the Karl Pearson Correlation coefficient was employed to test the hypothesis. The finding of the study established that the pre-primary schoolchildren were not actively engaged in psychomotor and creative activities because of inadequate availability of such opportunities that include; plays singing, painting, drawing sculpturing and singing, and dramatization. Andiema (2020) research focused on influence of child-centered methodology on the children's psychomotor and creative activities in the public pre-primary schools in West Pokot County, Kenya while this study focused on how parents influence the pre-primary school children's acquisition of the psychomotor activities in the public pre-primary schools in Vihiga County, Kenya.

2.6 Policy factors influencing implementation of learners' psychomotor activities

In a preschool learning institutional setting, there exist policies that are likely to promote or inhibit outdoor play activities for young children. Dymont and Bell (2007) recommended that the policies governing schools should encompass playgrounds to promote learners' psychomotor activities. Most teachers globally have the view that safety regulations impede stimulating outdoor activity experiences in preschool playfields (Copeland, Sherman, Kendeigh, Khalkwarf & Saelens, 2012, Little & Wyver, 2008). Some teachers are in doubt as to whether they are against the license regulations and rules when conducting outdoor activities (Blanchet-Cohen & Elliot, 2011).

Research studies show that teachers' fear of children's safety and litigation also instill the same fear in children (Little & Wyver, 2008). To encourage or promote learners' outdoor activity, effective policies concerning learners' safety, play fields, weather conditions, play attire, and parent-school relationship must be put in place to guide the teaching and learning (Wilke, Opdenakker, Kremers & Grubbels, 2013). A study by Naomi (2020) concluded that risk factors in any implementation of an educational curriculum arise from peers, gender mainstreaming, parental perception and support activities, learner's self-esteem, class size, and teacher's perception and attitudes.

Early education, sometimes referred to as early childhood care and development (ECCD), emerged at the 1990 World Conference on Education for all, held in Jomtien, Thailand, as an important extension of the more traditional approach to basic education, in which education begins with entrance into school. According to the Jomtien declaration, learning begins at birth (Coon & Mitterer, 2012). This calls for Early Childhood Care and initial education.

The preschool policy framework is important in taking into consideration the wholesome well-being of young children (Puk & Behm, 2003). Article 31 of the UN Convention on children's rights stipulates that play is part of children's lives and development. The article asserts that every child has an equal right to leisure, play, and recreational activities that are of the child's age (Puk & Behm, 2003). The convention also indicates that member countries should advocate for the child's rights by providing opportunities for play, recreation, and leisure activities in learning institutions.

One of the targets for the 1990s of the Jomtien Framework for action was an expansion of early childhood care and development activities, including family and community interventions, especially for poor, disadvantaged and disabled children (Barbarash, 2009). The Jomtien declaration and framework for action gave international presence and sanction to early childhood care and development, and to initial education in a way that it had not enjoyed previously. This study will focus on Kenya's preschool at the pre-unit level.

The United States of America has a population of over 300 million people with about 6 percent being young. Children are aged 3-5 years and illegible for pre-school (Pauen, 2012). The population targets ECD for all. Terms used to describe services for preschool children will encompass many disparate services such as childcare, daycare, preschool, head start, family child care, nursery school and pre-kindergarten. It is hard to distinguish the unique attributes of each mode of operation. These services have a relatively recent history in the U.S (Quigley, Pongsanon & Akason, 2011). The Nursery School movement developed by Universities emerged in the 1920s and 1930s. The last state to enact regulations and protect children was Florida in 1976. The country's unique comprehensive preschool policy for low-income children, head start, was created in 1965 to help improve life chances and educational success for children living in poverty. Some critical statistics related to the care and education of young children may help set the stage for ECD policy contrasts between the United States and at least one other country. In the US there are 19 million children under age 5, which represents a 4.5 percent increase between 1990 – 2000, (US Census, 2005). Though the learning resources in the United States of America that address the educational needs of young children are

extensive, they still represent a minimal fraction of the overall country budget, and that of the national insecurity budget (Quigley Ponsanon & Akason, 2011). However, this study considered neither politicians nor political inclinations yet they (politicians) are legislators who formulate policy. The study differed in that the respondents were parents, pre-school teachers, primary school head teachers and early childhood development and education supervisors in Vihiga County.

New states' early childhood policies develop each year, some in response to the preparation of and public hearings for the state's required to plan, and still others in response to legislative agendas of governors and legislators. Seldom is a new care and education policy linked to "Education for all" in promoting or passing the policy. It is as if EFA did not exist, except for the annual reporting to UNESCO (2011), which incorporates data and findings from state policies – and may miss the work of advocacy groups who argue for improved quality to be achieved with the policies that exist. Perhaps no country has more potential resources than the U.S for preschool-aged children in a complex society, but a set of seminal research projects in the United States starting in the 1960s consistently found that some children primarily from poor and ethnic minority populations (UNESCO, 2013). This study considered the Kenya education policy on ECDE but not that of governors in counties.

It is almost impossible to know which federal agency is responsible for overall ECD Policy, and advocacy groups abound – each urging more funding and more attention for early childhood services it has under its authority. In each of these two countries, early education policies have shifted and changed as new demands for country development arose. US early education policies have shifted from those daycare Centers for poor

children to child CAEW programs of many varieties under many different auspices, to cater to the need for child-care for to the post-World War II explosion in the number of working mothers of children under six. Only in the past 10 years has there been a concentrated effort, based on national state research, to expose the lack of quality in many of these arrangements and call for solutions (Elkind, 2007; Pauen, 2012; Glasgow, Dornbusch & Ritter, 2010).

Many people in the national research communities profess to know how to define and measure childcare and early education quality (Elkind, 2007; Glasgow, Dornbusch & Ritter, 2010), yet others remind us that quality remains an elusive concept (Glasgow & Whitney, 2009). Still, others lead the way in re-constructing thought around quality as a part of awareness of context complexity, plurality, and subjectivity (Galano, 2014). EFA may be more about the number of preschools and preschool children served than questioning the quality of ECD arrangements, but the discourse of quality is critical to the future of ECD. The most comprehensive studies of early care and education quality in the United States document that the majority of child care center settings are inadequate to meet children's developmental needs, with only about 10 percent rated as excellent (Dymment & Bell, 2008).

In the U.S, the federal childcare bureau allocates \$10 million annually for 10 years to child-care research partnership, research by scholars, and other independent researchers (Pauen, 2012). Individual university researchers have been able to obtain foundation findings for intensive studies, such as some cited in this paper. Head Start has had multitudes of research studies since 1965, some finding positive results and others directed toward cutting Head Start budgets on ideological grounds. Partly because of an

immense federal budget deficit, ECD research findings are currently hard to come by, and the federal commitment has been weakened. The progress in data collection and syntheses of data about early care education may now be lost in the shuffle between funding priorities, political ideologies about which research if any, to fund, and even how to understand which knowledge or evidence to privilege as truth (Staempfli, 2009). Early childcare and care (ECEC) in Sweden have been given high priority for nearly three decades and is one of the cornerstones of Swedish family policy. Reforms in this area have also been widely supported in the Swedish Riksdag (Parliament). This has enabled the implementation of a policy, whose guidelines did the Government at the beginning of the 1970s draw up and which has since been subsequently developed child care of high quality, expanded to provide full coverage, with the municipality as the organizers and financed out of public funds' (Shaffen & Kipp, 2010).

The Early Childhood Education and care (ECEC) was developed as part of the family policy with linkage to labor market policy. The Ministry of Health and Social Affairs has until recently been responsible for this area of children's play and games activities, with the National Board of Health and Welfare as the supervisor authority (Staepfli, 2009; Frost, Wartham & Reifel, 2002; Fromberg, 2002). This means that there are connections between ECEC and the family support system. For example, parental insurance and child allowances and that ECEC are organized for children of ages 1-6 and school-age childcare for children of ages 6-12, so that parents can combine parenthood with work, play and studies. A close relationship was developed between ECEC and the social services over responsibility for children in need of special support and children at risk of

being badly treated. USAID (2013) noted that ECEC has played an important role in the integration of children with disabilities into psychomotor play and society.

Staempfli (2009) recorded that in August 1998 a national curriculum for the Swedish preschool came into force. This curriculum covers goals and guidance for the activities of children 1-5 years of age in pre-school. Because of this curriculum, the preschool has taken a definitive step into the educational system and its pedagogical importance for the development of the child's learning has been widely recognized. In the municipalities around the country, work is now proceeding on launching the curriculum, which just like another curriculum, is an ordinance that the municipalities are obliged to follow.

The new and first- curriculum for preschool does not mean that preschool will become a school. On the contrary, traditional preschool pedagogical approaches emphasizes in the curriculum such as the child's well-being, and the importance of play (Potter & Hodgson, 2007). The preschool as before will maintain the role of play, and ensure that learning takes place based on the child's interests and needs. However, pedagogical content has a clearer focus and greater emphasis. The child's curiosity, industriousness, and desire to learn should be taken into account. The preschool should provide security, enjoyment through play and wealth of learning opportunities (Ungar, Dumond & McDonald, 2005).

A new education law regulating the basic framework of the education system was established in Vietnam in 2005 (Coon, Mitterer & John, 2012). According to the new law, early childhood education covers infants from the age of three months to six years. The law also clearly regulates the aim of early childhood education as preparatory education for primary school. The objectives of early childhood education are to help

children develop physically, emotionally, and intellectually, to shape the initial elements of personality as well as to prepare children for the first grade. The content of early childhood education must be suited to the psycho-physiological development of children, balanced between nurturing, caring, and educating, to help children develop a harmonious, healthy and active body; know how to respect, love, and regard grandparents, parents, teachers and elderly persons; form attachments to brothers, sisters, and friends; be frank, forthright, natural, aesthetically sensitive and intellectually inquisitive (Fisher, 2001; Fisher, Hirsh-Pasek, Golinkoff, Singer & Berk, 2011). The law states that the main method in early childhood education is to help children develop comprehensively through organizing play activities while giving special attention to providing models, collective instruction, and encouragement (Fisher, Hirsh-Pasek, Golinkoff, Singer & Berk, 2011).

In Africa, the government of Ghana toward its goal of eradicating child labor, poverty, has made several attempts and marginalization in educational outcomes for all children, the condition of disadvantaged children, remains devastating compared with those of more advantaged children (Taylor, 2008). The extent to which two new major Ghanaian education policy initiatives impact on this situation- namely, the introduction of early childhood care and development (ECCD) and the capitation grant (CG) policies towards childhood play. The article raises concerns regarding corruption, mismanagement, and lack of proper monitoring of the policy implementation process and argues that the current trend seems unlikely to deliver the type of outcomes necessary to end marginalization and suffering in Ghana. It proposes the inclusion of parents and community participation in all aspects of the policy production and implementation

processes. The social structure into which children are born and in which they have cared for shapes interpersonal variations and economic and social status in later years (Heckman & Masterov, 2007). Some poor families do not function well, resulting in negative consequences for their children now and later years. Such children can be compensated through effective government policies on play that serve their needs and those of their families' (Brigand, 2008). There is a global move towards early childhood education policies to improve the conditions of all children in Ghana.

Ghana, a country in West Africa and a former colony of Great Britain, has made significant attempts in the last five years to eradicate poverty and suffering, particularly for children in marginalized communities (Taylor, 2008; Brigandi, 2008). Emerging research supports the notion that better experiences in the early years are critical to raising educational outcomes in later years of schooling and equal access to early childhood education leads to poverty reduction, narrowing the exclusion gap, and raising community living standards (Brigandi, 2008).

In Nigeria, Ibhaze (2006) noted that, the education policy for preschool play is ridiculed with the diverse crisis. The governments should enable pre-schools institutions by strengthening teacher training, supervision, and monitoring, increasing and setting minimum teachers' salaries, providing financial assistance, providing teaching and learning materials in both public and private institutions, employing more qualified and professional teachers for play and physical and health education to reduce high teacher: pupil ratio.

A study by Bosah, Ejesi and Aleke (2016) in Nigeria on the basic minimum standards policy regarding physical activities in schools established that the central government and the federal government should ensure the provision of adequate teaching and learning materials, organize teacher in-service courses, have effective supervisory procedures, and funds and allow the federal government to establish more preschools. The study concluded that there was a positive significant relationship between the government policy on primary education, and learners' future performance. The study adopted the descriptive research design. The study utilized a purposive sampling technique to select 16 head teachers and 22 preschool teachers as the sample population. A checklist was the only instrument to collect and aid in data analysis and presentation. Though the methodology employed was appropriate, it, however, used a small sample of 38 respondents, one sampling technique in contrast to four sampling techniques; purposive, stratified, census and simple random techniques of this study. However, the reviewed study was conducted in West Africa as opposed to the current study that was done in Vihiga County, Kenya.

Schools should come up with policies that allow opportunities and suitable allocation of time for children to meet their holistic teaching and learning via play to support interest and development of skills in other learning activity areas (Brigandi, 2008). In most preschool centers, there exists much emphasis on academic outcomes. This limits psychomotor activity performance that also affects other preschool activity areas. The ECDE curriculum should be inclusive of the needs of the National Association for the Education of Young Children (NAEYC) and the International Play Association (IPA) that advocates for play during the pedagogical outdoor and indoor classroom approaches

that should be appropriate to the children's age, needs and development (Bedrova & Leong (2010). NAEYC is of the view that the development of appropriate practices results in sustained and increased children's health during the learning process.

It is noted that most nations inhibit opportunities for children because of prioritizing academic assessment of educational performance (Brigandi, 2008). In Nigeria, teachers have knowledge and awareness of the ECDE curriculum models of play but have a dilemma in executing them in practice. Brigandi (2008) state that play-related ECE Structure–Developmentally Appropriate Practice (DAP) does not have any tangible agreement in the execution of DAP among preschool teachers.

Peace (2014) reported that Abebe Hebron was the section head of Early Childhood Development and Special Needs of the Ministry of Education in Eritrea. The finalization of a curriculum for both formal and non-formal community-based children's programs that included childhood sports linked with an outreach services model reaching all districts of the horn of Africa country. The curriculum had to be translated into eight of the county's populous mother-tongue country's languages. Madam Hebron also sought to address long-term community capacity building through the implementation of a multi-media Parenting Enrichment Strategy utilizing a training of trainers' model. This work in Eritrea provided insights on how play plans had to be developed, coordinated, monitored, and updated as needed for the intent of the policies to be realized. This policy differs from the Kenyan policy in many aspects. In Ethiopia, the Education ministry is the lead line ministry while in Kenya, in terms of human resources, the Local Government ministry is the core.

UNESCO, (2004) reports that in Uganda, an East Africa country had an ECDE program that was directed by a Madam Hilda Nankunda whose focus was on the project work n play. This was on the analysis of existent policies on childhood play and games. They were designed to address the childcare needs of working families in Uganda. The work represented a focus for ECD research in Africa. That would become more common in the next few years. Nankuda's reviewed collective bargaining documents, trade union, and worker association materials. The findings of her study were that policies that existed were inadequate which this study was investigating in Hamisi Sub-County Vihiga County.

In Kenya, Karanja (2015) indicate that learners can construct their literacy skills if and only if play facilities are readily available and adequate. Obuchere (2011) states that there is evidence time allocated to play activities in the teachers' lesson preparations at the expense of an examination-oriented curriculum. Similarly, Elkind (2008), posits that play is no longer valued in educational activity areas. This is despite that in Kenya; the preschool curriculum has indicated the time allocation of daily play activities in the school timetable that ought to be followed (RoK, 2006).

The ECDE policy framework (2006), in Kenya, noted that preschool learners should have adequate allocation of resources to achieve quality education. This is because the ECDE centers provide basic education before advancing to higher institutions of learning. Fisher, Hirsh-Pasek, Golinkoff, Singer and Berk (2011) noted that young children's concentration span is low and therefore need varied activities for refreshment and relaxation to enable them to develop their muscles and increase class concentration during learning procedures.

In Kenya, higher literacy and numeracy levels and a healthier population are associated with societies investing more in early childhood education (NAEYC, 2014; Brigandi, 2008). These writers reiterated that: A healthy start in life gives each child an equal chance to thrive and grow into an adult who makes a positive contribution to the community- economically and socially (NAEYC, 2014). With the launch of the much-awaited Early Childhood Development Education policy by Vice-President Moody Awori (2008), there was a ray of hope for that part of the education sector, which had been neglected for too long (Koech, 2010; ROK, 2006). The document states that minimal acreage for ECD centers should be 0.125 of an acre, and 0.25- acres for urban areas and rural areas with high density, respectively. For rural areas with urban low density, the recommended minimum acreage should be 0.5 acres. In urban slums, the acreage could be less than 0.125 acres providing basic conditions of sanitation and health are met, all ECD centers were to be required to provide standard sizes classrooms measuring 8×6 meters and accommodating a maximum of 25 children. Toilets should be at a ratio 1:25. All ECD centers should be required to provide safe drinking water as well as play and learning equipment.

A study by Naomi (2020) on risk factors affecting the implementation of secondary school students' performance established that risk factors in any implementation of educational curriculum arise from peers, gender mainstreaming, parental perception and support activities, learners' self-esteem, and class size and teachers' perception and attitudes. The study adopted a descriptive survey and correlational research design, unlike the current study that used a mixed methods design. The instruments used to collect and aid in data analysis were questionnaire, interview schedule, document analysis and focus

group discussion discussions but the currently utilized questionnaire, interview schedule, and observation guide. The study used secondary school form three and four teachers and students whereas the present study used pre-primary teachers, teacher trainers and preschool learners in PP2 class as respondents. Whereas the present study was conducted in One Sub County, the reviewed literature was conducted in seven Sub Counties. Therefore, the present study filled this gap.

Early Childhood Development Education centers in Kenya are required to provide children with a snack during break time and a balanced diet lunch (Wangare, 2010 & Wanyama, 2014). All cooks and food handlers must have valid medical certificates and shall be required to cover their hair and put on uniforms. All the centers are required to keep a list of emergency contacts of parents, fire service departments, clinics, hospitals, and police stations. In addition, every ECD center should have appropriate fire-fighting equipment. Untrained ECD teachers, who should have undergone a five-week ECD short-course, should only act as teacher assistants. The Government shall undertake to remunerate two teachers in every public ECD center. Learning in ECD centers should be activity based and should be through play. The language of the catchment area (mother tongue) shall be used in all centers for communication and instruction. The preschool children should gradually be introduced to English and Kiswahili (Koech, 2008; ROK, 2006).

2.7 Summary of literature knowledge gaps

Kroeker (2017) in the USA conducted a study on indoor and outdoor play in pre-school programs. The study noted the influence of psychomotor activities on teacher and learners' interactions and adaptation. The findings revealed that there were not any

significant differences between classroom and out-of-classroom psychomotor activities in regards to learners and teachers' involvement. The learners formed the only participants of the study, unlike the present study that included teachers, head teachers and ECDE supervisors. Gunseli and Guzin (2017) conducted a study in South Africa on the effect of outdoor learning activities on the development of preschool children as they grew. The study established that teachers' engagement with learners within, and out of class activities enhanced children's holistic development. The study adopted an experimental research design in contrast to the present, which adopted a concurrent triangulation design. Mutindi, Pamela and Nyambega (2019) investigated play activities used by teachers in early childhood development and education centers in Kericho County, Kenya. The study had two categories of participants with a sample size of 48 head teachers and 104 pre-primary school teachers that were selected through stratified and simple random techniques in contrast to the current study where stratified, simple random, and census sampling techniques were used. In Turkey, Alat, Akgümüs and Caval (2012) carried out a study to determine the school environment on the preschool learners' educational achievement.

A study by Macharia (2012) on the adequacy of the playgrounds in schools concluded that 45% had grassy and rough surfaces with inadequate play materials and equipment. However, the reviewed study focused on the safety of playgrounds but the current focused on the selected factors influencing implementation of the psychomotor activities in the public pre-primary school curriculum in Vihiga County, Kenya.

Teacher training influences the play activities with adequate learning resources and a suitable learning environment (Tsung-Hui & Wei-Ying, 2008). A study in Australia

asserts that psychomotor activities are more emphasized in contrary to Kenya that parents stress on academic performance (Wanyama & Quay, 2014).

Dyment and Bell (2007) argue that the existing rules and policy formulation in most countries do not target school fields in promoting the implementation of psychomotor activities. However, many teachers believe that health, safety regulations, and weather conditions inhibit active participation in play activities (Copeland, Sherman, Kendeigh, Kalkwarf & Sailens, 2012; Little & Wyver, 2008). A study by Ochanda (2015) states that there is no policy framework on the provision and maintenance of play facilities and equipment which negates the learners' participation in psychomotor activities. However, Ochanda's (2015) study was conducted in a smaller Suba East Sub County while this study was conducted in a large geographical area, Vihiga County. Nonetheless, the reviewed study did not focus on the selected factors influencing the implementation of the learners' psychomotor activities in the public pre-primary school curriculum, a gap this study tried to investigate in Vihiga County, Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

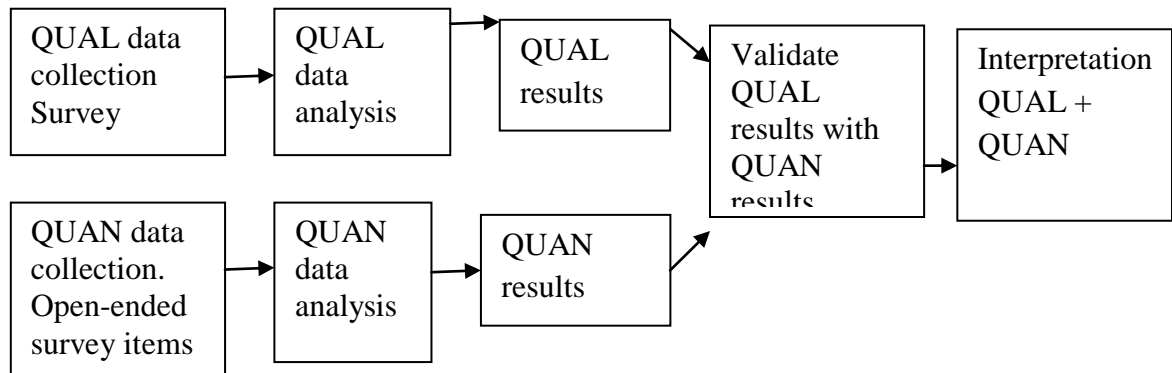
3.1 Introduction

This chapter outlines the following aspects: research design, location of the study, target population, sample size and sampling techniques, research instruments, validity and reliability of the instruments, trustworthiness, credibility, transferability, conformability, triangulation, dependability, data collection procedures, data analysis techniques and ethical considerations.

3.2 Research Design

Durrheim (2006), define research design as a planned structure for the activity that serves as a link between the tools of research and the application of the research plan. This study adapted the Concurrent Triangulation design that is premised on the mixed method approach as proposed by Bryman (2012). According to Johnson, Onwuegbuzie and Turner (2007), concurrent triangulation design employs the concurrent use of two or more methods for purposes of confirming, cross validating, or corroborating the study findings. The design has a combination of both qualitative and quantitative data intending to provide a complete analysis of the research phenomenon under investigation. In this study, the researcher used the design to typically gather the two forms of the data approximately at a similar time and then merge the information for the overall interpretation of the findings (Creswell & Clark, 2018). In these design inconsistencies, findings are further probed. The adoption of this design was because the different weaknesses and strengths of both quantitative and qualitative paradigms are identified for

the final findings of the study (Creswell & Clark, 2018). Similarly, the study used the design to compare the qualitative and quantitative results for the conclusion of the findings. In this study, the quantitative data from the head teachers and teachers were concurrently gathered and analyzed along with those of the qualitative data from the ECDE supervisors and parents for the triangulation and credibility of the findings of the study. Therefore, collecting of the data was conducted concurrently to mitigate the limitations of the study rather than the use of a single data point that might seem to be biased. The design is indicated below.



Source: Adapted from Creswell (2014)

Figure 3.1: Concurrent Triangulation Design (Creswell, 2014)

3.3 Location of the Study

The location of the study was in Hamisi Sub-County in Vihiga County. According to the Ministry of Education (2015), Hamisi Sub-County is in the Vihiga County that was created together with the other forty-seven (47) other counties according to the new constitution that came into effect on 27 August 2010. What was formerly Western Province was divided into four counties namely; Vihiga, Kakamega, Bungoma and Busia. Vihiga County covers an area of 8264 square kilometers (Mwangi & Shigali, 2009). Hamisi Sub County was purposively selected for the locale of the study to generalize the

findings to the whole Vihiga County and the entire Counties of Kenya. Hamisi Sub-County is located between 34.45° E and 35° E and between 2.00° S and 10.00° S at their extreme points. The Equator, which is 0 Degrees, runs through Hamisi Sub-County at Gambogi Township parallel to the Kisumu-Kakamega Highway. To the North of Hamisi Sub County is Kakamega County, to the East is Nandi County, to the South is Kisumu County, and to the West are Vihiga and Sabatia Sub-Counties. Begi (2009) notes the importance of citing the study location in research for easy access to the locale. Most of the schools hardly occupy two acres of land. The landscape is hilly and rocky and becomes muddy during the rainy season and dry during the dry season.

The choice of Hamisi Sub County was premised on the fact that most pre-primary schools tend to limit play activities at the expense of academic-oriented activity areas besides the rural diversification regarding the; socio-economic status, religious affiliations, and cultural backgrounds. This enabled a valid blend for comparability of the play resource factors and the influence of selected factors in the implementation of the learners' psychomotor activities in the pre-primary school in the curriculum in Hamisi Sub County, Vihiga County. Similarly, records indicate that there has been no study carried out in regards to the selected factors influencing the implementation of the learners' psychomotor activities in the pre-primary school curriculum in Vihiga County. The study was conducted in Hamisi Sub County (Appendix, xv) in Vihiga County.

3.4 Target Population

Kothari (2019) defines the target population as a group or category of human beings, animals, or objects, which have common characteristics identified as the focus of the study. Orodho (2012) also defines the population as all the items, things, objectives, or

people under consideration in any field of inquiry. The total target population comprised 342 including 110 public primary school head teachers, 110 teachers in-charge of each of the public pre-primary schools, and 110 public pre-primary school parents' representatives on the School Board of Management (BOM) and 12 ECDE supervisors of Hamisi Sub County Education Office (2016).

The study used pre-primary two (PP2) class level of learning because this is the highest pre-primary school level who were preparing for the primary grade 1 level of learning for the following year. It is at the PP2 level of learning that the psychomotor activities have a high scope of curriculum implementation than those in pre-primary one (PPI) learning. The head teachers were selected because they were in charge of all the administrative and managerial roles in the public primary schools that host pre-primary school level of learning. The public pre-primary school teachers were selected because they held the responsibility for the implementation of the psychomotor activities in the public pre-primary school curriculum. The pre-primary school parents were selected because they played a pivotal role in the implementation of the psychomotor activities in the ECDE curriculum. The Hamisi Sub County ECDE supervisors were selected because they were well versed in the ECDE (pre-primary) curriculum and its supervisory role. Table 3.2 represents the representative target population of the study.

Table 3.1: Target Population

Zones	Head teachers	Teachers	Parents	ECDE supervisors	Total
Shaviringa	26	26	26	2	80
Shamakhokho	16	16	16	2	50
Tambua	13	13	13	2	41
Gisambai	21	21	21	2	65
Chepkoyayi	21	21	21	2	65
Banja	13	13	13	2	41
Total	110	110	110	12	342

Source: Hamisi Sub-County Education Office (2016)

3.5 Sampling Techniques and Sample Size

3.5.1 Sampling Techniques

Sampling is a research technique in which a representative sample from the target population is selected for the actual study (Mugenda & Mugenda, 2003). However, where the target population is large enough, different techniques of sampling are employed as the sample. The schools that were represented in the study were selected by use of a stratified random sampling technique because the target population was divided into the six strata based on the Hamisi Sub County Educational Zones that are; Shaviringa, Shamakhokho, Jepkoyayi, Banja, Tambua and Gisambai. This method was preferred because the population was not homogenous and it ensured that all the units included in the sample are selected in proportion to their occurrence in the population (Begi, 2009; Creswell & Clark, 2018). The simple random sampling technique was employed to select the representative sample of the head teachers, teachers and parents from each of the stratum for the actual study.

The census sampling technique was preferred to sample all the 10 parents and the 12 ECDE supervisors from the six (6) strata of the study area, that is, Hamisi Sub County for the study. The researcher identified all the cases of the ten (10) parents and the twelve (12) ECDE supervisors because of their limited cases to be included in the study to collapse and strengthen the findings of the study. The researcher targeted all the 10 parents and the 12 ECDE supervisors as the sample respondents because they possess viable information concerning the public pre-primary ECDE curriculum for this study. According to Saunder, Lewis and Thornhill (2019) and Begi (2009), the researcher should target a group of participants believed to provide adequate and reliable information for the actual study. This is shown in Table 3.2.

Table 3.2: Respondents’ sampling Techniques

Respondents	Sampling Techniques
Head teachers	Stratified and simple random sampling technique
Teachers	Stratified and simple random sampling technique
Parents	Stratified and simple random sampling technique
ECDE Supervisors	Census sampling technique

Source: Researcher generated

3.5.2 Sample Size

Gay, Columbus and Airasian, (2015) and McNabb (2009) postulate that if the target population is not large enough, a limited sample size of 20% should be considered adequate for the study. Jwan (2010) adds that 10% or more of a population makes a suitable representative sample size for the actual study population. The sample of the participants was selected with the aim of concluding the target population. The total

sample for the study was 88 that were based on the 30% (Jwan, 2010; Mugenda & Mugenda, 2003) of the target population for head teachers, and teachers. The selection of the parents representative on the school B.O.M was premised on 10% (Jwan, 2010; Mugenda & Mugenda, 2003) of the parents population. The selection of the Sub County ECDE supervisors was based on the census sampling technique because of their minimal representation in the population. Therefore, the total sample size for the study was 88, which included 33 (30% of 110) head teachers, 33 (30% of 110) teachers, 10 (10% of 110) parents, and 12 (100% of 12) ECDE supervisors. This is indicated in Table 3.3 below.

Table 3.3: Respondents' Sample Size

Zones	Head teachers	Teachers	Parents	ECDE Supervisors	Total
Shaviringa	8	8	3	2	21
Shamakhokho	5	5	1	2	13
Tambua	4	4	1	2	11
Gisambai	6	6	2	2	16
Chepkoyayi	6	6	2	2	16
Banja	4	4	1	2	11
Total	33	33	10	12	88

Source: Researcher generated

3.6 Research Instruments

The research instruments are the tools that a researcher adopts to gather information for the actual study. The research instruments enable the respondents to express their opinions, views, attitudes, and present suggestions on the variables under investigation.

The study used a self-constructed questionnaire for primary school head teachers and pre-primary school teachers. The Focus Group Discussion Guide (FGD) for the public pre-primary school parents, and the Sub County ECDE supervisors, the observation guide and the document analysis schedule administered by the researcher to collect data and aid in the analysis, presentation and generalization of the findings of the study.

3.6.1 Questionnaire for the ECDE teachers and head teachers

The self-constructed questionnaire was administered to pre-primary school teachers (Appendix VII) and primary school head teachers (Appendix, VIII). The questionnaire had items on the demographic information and the variables under investigation. The questionnaire had both open-ended and closed-ended items. The respondents had a free choice of providing an appropriate choice of responses for the options given. The closed-ended structured questions had responses that were easily scored and enabled the researcher to tabulate and analyze the findings of the study. The open-ended format questions allowed participants to provide a wide range of responses than the closed-ended questions (Jwan, 2010). The questionnaire was employed in this study to obtain comparable responses. The questionnaire had a 5-point Likert scale with the response score format ranging from: strongly disagree (1), disagree (2), undecided (3), agree (4) and strongly agree (5) for objectives one, two and three. Objective four on policy was based on a five Likert scale ranging from Very Low Influence (1), Low Influence (2), Moderate Influence (3), High Influence (4), and Very High Influence (5).

According to Mugenda and Mugenda (2003), the use of questionnaire instruments is the most appropriate for research studies because they aid in collecting information in a straightforward and limited time available. Ary, Jacob and Razavieh. (2010) and Jwan

(2010) further states that the Questionnaire is the basic way in which the data is gathered in the survey research. The questionnaire was most suitable for this study because it was economically convenient in regards to the limited time spent responding to the self-constructed questions. The use of the questionnaire was adopted for this study because it was quick to compile, provided straightforward responses, and was easy to code as advocated by Bryman (2012).

3.6.2 Focus group discussion for parents and ECDE supervisors

The focus group discussion (FGD) was administered to parents of the public pre-primary schools (Appendix, IX), and Hamisi Sub County ECDE supervisors (Appendix, X). The FGD is administered to a group of respondents that focus on a specific subject, by-product, matter, or service, and include a requirement for the collective discussion among the respondents (Saunders, Lewis & Thornhill, 2019). The respondents were chosen because they possessed the common features that were related to the study under investigation, and were inspired to discuss and provide their points of view without coercion in reaching an agreement (Krueger & Casey, 2015). According to Morgan (2013), the focus group discussion guide constitutes six to eight participants.

The current study was grouped into two focus group discussion guides: for pre-primary school parents and the Sub County ECDE supervisors because the geographical terrain of Hamisi Sub County could not easily allow the individual face-to-face interview. The focus group discussion had five parents in each group and six ECDE supervisors in the other group. The conversation between each group and the researcher lasted between two and two hours for each group. Therefore, the focus group discussions assisted the researcher to have a deeper understanding of the phenomenon under investigation and

strengthening the findings from other instruments. The purpose of the focus group discussion aimed to have a face-to-face discussion that resulted in the discovery, investigation, and deeper understanding of the variables under investigation. According to Patton (2015), the focus group discussion aims to gather high-quality information in a social setting, and aid in having a complete view of the subject under consideration from research respondents. Mugenda & Mugenda (2003) adds that focus group discussion enables the researcher to obtain in-depth data required to meet the specific objectives of the study.

3.6.3 Observation Schedule

According to Fraenkel, Wallen and Hyun (2012), the observation tool provides in-depth factual and precise information about the study variables. Wambiri and Muthee (2018) also explain that an observation technique is a method through which the researchers gather first-hand data on the observed programs, processes, and behavior. The researcher used the observation schedule (Appendix, XI) to capture the participants' interactions, and behavior through learners' involvement in the psychomotor activities such as the availability of playgrounds, play materials and equipment, and the preparation of the teacher's professional records. The observation schedule was considered appropriate to triangulate the findings of the study from those of the focus group discussion guide and the questionnaire. According to Howard (2010), an observation tool is used to ascertain how the teachers adapt to the play activities to motivate the learner's participation during the lesson presentation.

3.6.4 Document Analysis Schedule

The researcher used the document analysis schedule (Appendix XII) to check the policy documents, school policy documents, teaching manuals, schemes of work, lesson plans, continuous assessment tests, and school minutes' books to respond to policy factors and parents participated in the implementation of learners' psychomotor activities in the pre-primary school curriculum. Bryman (2012) noted that the document analysis schedule is ideal for checking documents and ensuring that certain traits are highlighted from the documents for the research study.

3.7 Validity, Reliability, and Trustworthiness of the study instruments

3.7.1 Validity of the Study Instruments

Onwuegbuzie, Dickson, Leech and Zoran (2012) describe validity as the extent to which a test measures what it is supposed to measure. Jwan (2010) defines validity as the degree to which a test measures what it intends to measure. Before collecting data, the pilot study was conducted to enhance instrument validity and reliability. Piloting is defined as the prior gathering of information by making use of the constructed tool whose sample is smaller than the sample size to be applied for the actual study (Polit & Beck, 2021). According to Jwan (2010), the main aim of a pilot study tools is to determine the validity, clarity, and reliability of the item content and the suitability of the language used. Before collecting data, a pilot study was conducted to establish the strength and weaknesses of the tools. Teijlingen and Hundley (2001) suggested to the researchers conduct a pilot study using 1% to 5% of the sample size of the actual study. Thus, a pilot study was conducted in the neighboring Sabatia Sub County on eight respondents that had similar characteristics to those of the actual study. This aimed at not involving the participants in

the actual study locale because they already had prior information on the responses of the study instruments. The pilot study enabled the researcher to identify and refine any erroneous information that could inhibit the strength of the instruments' validity.

In this study, the researcher tested for the construct and content validity. To ensure the construct validity, short and straightforward close-ended questions were used. The questionnaires were constructed in simple and clear language for the respondents to provide their responses. The sentences in the questionnaire instrument were arranged from simple to complex items. To ensure content validity, the researcher ensured that all the study variables of the study were captured on the instruments. Anikweze (2009) explains that the instrument's validity is refined by the expert judgment that assists in determining the precise domains of the contents that the study intends to measure through sampling techniques and the suitability of the research questions or hypothesis. In this study, the expert judgment from the peers and university supervisors who are experts in the field of research helped to identify and refine errors in the study instruments. This was to ensure that the study instruments accurately measured the domains of the variables under investigation.

The researcher sought supervisors and peer consultation on the content validity index (CVI) because their expertise and knowledge were acknowledged. The CVI was enhanced by the use of the instruments on the 8 respondents that included 2 teachers, 2 head teachers, 2 parents from the two public pre-primary schools, and 2 ECDE supervisors from two Hamisi Sub Counties that were not included in the actual study. The experts observed and provided their views on the content and the face validity. Thus,

36 returned items from a total item of 56 were considered suitable for the face and the content validity. The formulae used were:

$$\text{CVI} = \frac{\text{Total agreement on each relevant judgment}}{\text{Total items in the instruments}} \times 100$$

Total items in the instruments

$$= \frac{46}{64}$$

64

$$= 0.72$$

The CVI of 0.72 was deemed suitable for the instruments to be used for the collection of data and aid in the analysis and the conclusion making of the findings of the study. According to Mugenda and Mugenda (2003), if the instruments provide a coefficient of 0.7 and above, then they are deemed appropriate for the data collection during the actual study. Therefore, the pilot results administered on the 8 (eight) participants and those of the experts' submission enabled the final alteration and revision of the instruments' validity.

3.7.2 Reliability of the study instruments

Reliability is the extent to which the research results are consistent and replicable (Amin, 2005; Kothari, 2014; Orodho, 2009; Bonet, 2010). Reliability refers to the extent to of the instruments yield consistent information after several trials (Kothari, 2014). An instrument is considered reliable when it continuously produced similar information from the same participants over some time. For instance, in the survey research, if a test and retest technique was conducted for two weeks lapse period, similar results are attained. Saunder, Lewis and Thornhill (2019) and Oso and Onen (2011) averred that if the instrument's reliability coefficient is 0.7 or higher, then it is considered appropriate for

the collection of the data. The reliability instruments coefficient was obtained based on the Cronbach Alpha method. This technique is considered most suitable in the circumstances where the data collection instrument has been constructed based on the closed-ended multiple-choice options and administered in a single session (Kothari, 2019).

The test re-test technique was adapted to test for the instrument's reliability. Thereafter the internal consistency was established by calculating the Cronbach's coefficient alpha (McNabb, 2009). A test-retest technique was considered suitable for this study because the time taken to ascertain the alpha coefficient that is administered on the same participants' responses was only limited to a short period of two weeks. The test-retest technique was conducted in the two schools and two Sub County ECDE supervisors chosen through a convenient sampling technique for the pilot study. The pilot respondents of the study were 8 which included; 2 public pre-primary school teachers, 2 head teachers of public pre-primary schools, 2 parents of the public pre-primary schools, and 2 ECDE Sub County supervisors. The reliability correlation coefficient (r) was calculated based on the Pearson Product Moment Correlation Coefficient (PPMCC). According to Mugenda and Mugenda (2003), a coefficient of 0.7 (70%) or above is deemed suitable for the instruments' reliability otherwise the instruments would be subjected to re-piloting to yield the credibility and trustworthiness of the tools before the actual study. Similarly, the recommendations suggested by George and Mallery (2019) that “>0.9 is Excellent, > 0.8 is Good, > 0.7 is Acceptable, > 0.6 is Questionable, > 0.5 is Poor and < 0.5 is Unacceptable’ were considered to determine the coefficient alpha. The (PPMCC) formula is indicated as.

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2][N \sum Y^2 - (\sum Y)^2]}}$$

Where r = Pearson Product Moment Correlation Coefficient

$\sum X$ = the total of raw X scores,

$\sum Y$ = the sum total of raw Y scores,

$\sum xy$ = the sum of the product of each X times and each Y times

$\sum X^2$ = the sum of the square of each X- scores,

$\sum Y^2$ = the sum of the squares of each Y – scores.

N = the number of paired x and y scores.

The results of the pilot study along with those of the expert judgment informed the final revision of the repetitiveness, ambiguities, and jargons in both the quantitative and qualitative study instruments. The pilot findings from the study participants are indicated in Table 3.4.

Table 3.4: Reliability of the questionnaire instruments

Participants	Reliability Coefficient
Public pre-primary school teachers	0.75
Public pre-primary school head teachers	0.78
Public pre-primary school parents	0.74
Sub County ECDE supervisors	0.72

Table 3.4 shows that the questionnaire reliability coefficient values were above 0.7, and therefore deemed appropriate for the actual study. Mugenda and Mugenda (2003) states that a coefficient of 0.7 and above is appropriate for the actual study.

3.7.3 Trustworthiness of Qualitative Data

The validity and reliability are technologies used to address the issue of quality of research in qualitative data studies. According to Schreier (2012) and Saldana (2011), the issue of quality of research is a concern of qualitative research. However, different terms and procedures are used to address this scenario. Although the underlying concepts were related to the quality of the research, they are indeed the same. Different terminologies were brought about by the nature of the data and philosophical assumptions that these two approaches have brought (Elo, Kaanainen, Kanste, Polkki, Ultriainen, & Kyngas, 2014). To address the trustworthiness of the study instruments, the quality of the quantitative credibility and dependability were addressed.

3.7.4 Credibility

In qualitative studies, the concept of dependability or trustworthiness is widely used rather than reliability (Bryman, 2012). Unlike in qualitative studies where reliability refers to the consistency of the findings if the study is replicated, in qualitative studies, there is a possibility of variability in the findings of the study because of the change in the context and time matters (Cohen, Manon & Morrison, 2018). According to Ary, Jacobs and Razavieh (2010) and Dye, Schatz, Rosenberge and Coleman (2000), consistency is dependent by the extent to which the variations can be tracked and explained. To ensure the dependability of the study, the researcher applied the triangulation method of the instruments. In qualitative studies, reliability is just a match between the data collected from the fields and what is happening in a natural setting (Cohen, Morrison & Morrison, 2018).

3.7.5 Transferability

Transferability is defined as the degree to which the results of the research can apply or transfer beyond the bounds of the project (Coolican, 2019). Transferability implies that the results of the research study could apply to similar situations or individuals. According to Dye, Schwatz, Rosenberge and Coleman (2000), the knowledge, which was obtained in the context, will be relevant to the other researchers who will carry out the research studies in another context by utilizing certain concepts, which are initially developed. The transferability is comparable to the generalizability of the study findings (Adedoyin, 2020).

3.7.6 Conformability

According to Coolican (2019), conformability refers to the inquiry's findings being supported by the data collected. Conformability is based on the acknowledgment that the research is never objective. It addresses the core issue that the findings should represent as far as possible, the situation being researched rather than the beliefs, pet theories, or biases of the researcher. Conformability is based on the perspective that the integrity of the findings lies in the data, and that the researcher must adequately put together the data collected and analyzed, indicates the analytic processes, and the findings in such a way that the reader can confirm the adequacy of the findings (Gasson, 2009).

3.8 Triangulation

Triangulation involves using multiple data sources in an investigation that produces an in-depth understanding of the phenomenon under investigation (Bryman, 2012). Triangulation involves checking out the consistency of the findings of the study that have

been generated by the different data collection methods. This study on the selected factors influencing the implementation of the learners' psychomotor activities in the public pre-primary school curriculum in Hamisi Sub-County, Kenya involved various respondents namely; pre-primary school; head teachers, teachers and the ECDE Sub County supervisors and the multi-use of the three data instruments namely; questionnaire, focus group discussion guide and an observation guide.

3.9 Dependability

To address the dependability issue more directly, the process within this study was reported in detail thereby enabling future researchers to continue, as in repeating the research, if not to gain the same research result with a similar research design, therefore may be viewed as a prototype mode (Bryman, 2012). Such in-depth coverage also allows the reader to assess the extent to which proper research practices have been followed. This will enable the readers of the final report to develop a thorough understanding of the method and its effectiveness. Jwan (2010) and Adedoyin (2020) note that the text includes sections devoted to the operational detail of data gathering and addressing what is to be done in the field and the choice of the research design to be adopted.

3.10 Data collection procedures

Creswell (2018) asserts that representing the site where research takes place and gaining permission before entering a site area is paramount in research. Permission was sought and obtained from the Board of Postgraduate Studies (BPS) of Jaramogi Oginga Odinga University of Science and Technology (JOOUST), the National Commission for Science, Technology and Innovation (NACOSTI), the County Director of Education (CDE), the

County Commissioner, and head teachers of public preschools that participated in this study. The researcher stated the aim and purpose of the study and the need for the participants to give their consent and cooperation. To establish a close working relationship with respondents the researcher conducted familiarization visits for the introduction to the public primary school head teachers that host the pre-primary school levels of learning, pre-primary school teachers, and parents, and the Hamisi Sub County ECDE supervisors to book for the appointment with the respondents for the administration of the study instruments. The researcher explained to the respondents the aim of the research study and then left behind the questionnaires to be filled and collected after a lapse period of two weeks. The researcher to build the confidence of the participants involved in the study comprehensively addressed any related concerns emanating from the study tools. On the day of collecting the questionnaire, the researcher with the head teachers' permission conducted an observation guide.

The researcher also conducted a face-to-face oral focus group discussion guide with the Hamisi ECDE Sub County supervisors and the parents of the pre-primary schools at the convenient locale for the study. The data collected focused on the variables of the study under investigation. The researcher asked for permission from supervisors and the parents to audio-tape the conversations for effective data analysis. The focus group discussion guide lasted for at least 60 minutes (1 hour) for each of the participant groups.

3.11 Data analysis

Orodho (2012) defines data analysis as the process of evaluating data using analytical and logical reasoning to address the variables identified for the study and test the stated research hypothesis. The researcher analyzed the data collected to discover the

information that would help in arriving at the conclusions of the study. The data collected was edited, coded, and entered into the computer software (SPSS), version 22, for the analysis, and conclusion findings of the study. The correlations were determined based on the Pearson Moment Correlation Coefficient (PMCC). The questionnaires, the focus group discussion guide, the observation schedule, and the document analysis schedule item were arranged and grouped about the hypotheses of the study. The data gathered was concurrently analyzed through both of qualitative and quantitative analysis using varied statistical techniques and inferences derived from the analysis. The data collected was edited, and checked for completeness. The questions were coded, and cleaned to ensure that the data gathered was clear and precise before the actual analysis.

3.11.1 Qualitative data analysis

The qualitative data analysis entails modifying the data into the findings of the study. The qualitative data from the pre-primary school parents, the Sub County ECDE supervisors, the observation guide, and the document analysis schedule administered by the researcher were analyzed thematically in narrative and prose form based on the research objectives to support and strengthen the quantitative findings of the study. The thematic analysis has both merits and demerits. The qualitative information from the open-ended items was systematically organized into themes and patterns regarding the objectives of the study. The study adopted the content analysis to aid in the data analysis obtained from the face-face focus group discussion guide. The researcher generated a coding system from the sample participants. Mugenda and Mugenda (2003) state that coding needs adapting an actual code, to serve the aim of identifying real facts, feelings, or attitudes from the texts. The variables under investigation were classified in line with the themes of the study. The

researcher generated the codes in the groups under the main themes and the summarized report writing.

The researcher, therefore, evaluated the usefulness of the data in regards to the responses to the study objectives. The merits included accommodating the data sets and flexibility, which allows the researchers to test the multiple theories across the board. Qualitative data analysis is a method for identifying and analyzing the patterns within the collected data (Raburu, 2011; Braun & Clarke, 2006; Smit, 2015). According to Merriam (2009), the qualitative data gathered should concurrently be analyzed along with that the quantitative data for the triangulation of the findings of the study. This study adopted the six phases of thematic analysis as indicated in Table 3.5.

Table 3.5: Phases of Thematic Analysis

	Phase	Description of the process
1	Familiarizing yourself with data	Transcribing data, reading, and re-reading the data through noting down initial ideas.
2	Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code
3	Searching for themes	Collating codes into potential themes, gathering all data relevant to each theme
4	Reviewing themes	Checking if the theme work concerning coded extracts and the entire data set generating a thematic map of the analysis
5	Defining and naming the themes	Ongoing analysis refines the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme
6	Producing the report	The final opportunity for analysis, selection of vivid, extract examples, the final analysis of selected extracts, relating the analysis to the research question and literature, and producing a scholarly report of the analysis. (Braun and Clarke, 2006)

Source: Extracted from Braun and Clarke (2006)

Thematic analysis was used to analyze the qualitative data and focused on the discussion of the themes. The analysis emphasized on the organization of data that was rich in the descriptive data set. It went further in creating themes. A study by Raburu (2011) and Smit (2015) noted that thematic analysis is the most used form in qualitative analysis. The themes are developed on each objective of the study in the form of qualitative analysis. The themes of the psychomotor activities were developed on each of the objectives of the study from which the questions are developed. The focus group discussion guide that was conducted on the Sub County ECDE supervisors and the parents during the data analysis was used to determine the participants' perception of the selected factors influencing the implementation of the learners' psychomotor activities in the public pre-primary school curriculum in Vihiga County.

3.11.2 Steps in Thematic Analysis

The qualitative analysis was also analyzed based on the following excerpts, codes, and themes from the study as depicted in Table 3.6.

Table 3.6: Sample excerpts that emerged and transcribed into codes and themes.

Excerpt	Codes	Themes
“Some learners think psychomotor play should done daily without timing.”	FGD 01 FGD 1	Policy misinterpreted
“Parents look at psychomotor Activities as a pure waste of valuable teaching and learning time as they can play after school.”	SFGD 02 FGD 2	Poor attitude of parents
"Water, basins, and soap are sometimes inadequate for bathing and washing our psychomotor activities on a daily basis when school is in session"	SFGD 02 FGD 1	Policy not well interpreted
“It would be better for us if teachers specialized in teaching psychomotor activities were employed to teach psychomotor activities only to pre-primary learners.”	PFGD 01 FGD 2	Teachers misinterpretation
“Fixed psychomotor activities resources like the ladder and merry-go-round are not in our pre-primary school as they are in our neighboring school yet they don’t use them as regularly as possible.”	PFGD 01 FGD 2	Poor policy of resources distribution
“Older learners bully the younger ones while occasionally inflict actual bodily harm to the weaker learners some of who completely drop out of pre-primary.”	PFGD 02 FGD 1	Indiscipline learners
“We punish children when they come home with soiled games kits and sometimes torn arising from participating in psychomotor activities.”	PFGD 01 PFGD 2	Ignorant on curriculum
“Teachers are always busy marking learners' work before the next class because their pre-primary classes are large.”	SFGD 01 SFGD 1	Poor time management by the teachers
“Teachers don’t allow learners to play freely Psychomotor activities of our choice the way we know.”	PFGD 02 FGD2	Lack of professionalism

Source: Adapted from Braun, Clarke and Terry (2014)

3.11.3 Quantitative data analysis

Kombo and Tromp (2011) postulate that quantitative data analysis encompasses a measure of numeric values and allows describing data in the form of frequencies, means, percentages and standard deviations. First, the gathered quantitative data were cleaned, coded, and entered into the computer software Statistical Package for Social Science (SPSS). This was done to aid in the processing and analysis of data.

The quantitative data were obtained from the public pre-primary schoolteachers and the public primary school teachers from the questionnaire instrument. The quantitative data were analyzed by the use of both descriptive and inferential statistics. The descriptive statistics entailed the use of the frequencies, means, percentages and Pearson Moment Correlation Coefficient and were presented in the form of graphs, pie charts and tables. The inferential statistics, one-way ANOVA was used to ascertain the relationship between the independent and the dependent variables at a = 0.05 confident level. The quantitative data analyzed is summarized in Table 3.7.

Table 3.7: Quantitative data analysis matrix

Research questions	Independent variables	Dependent variables	Statistical test: Descriptive statistics
(a) How do the teacher factors influence the implementation of learners' psychomotor activities in the public pre-primary school curriculum?	Teacher factors	Implementation of the psychomotor activities in the curriculum	Frequencies, percentages, and means
(b) How do the physical resource influence on the implementation of learners' psychomotor activities in the public pre-primary school curriculum?	Physical resource factors	Implementation of the psychomotor activities in the curriculum	Frequencies, percentages, and means
(c) How does parental participation influence on the implementation of the learners' psychomotor activities in the public pre-primary school curriculum?	Parental participation	Implementation of the psychomotor activities in the curriculum	Prose and narrative form
(d) How do the ECDE policy factors influence on the implementation of the learners' psychomotor activities in the public pre-primary school curriculum?	Policy factors	Implementation of the psychomotor activities in the curriculum	Frequencies, percentages, and means

Source: Survey Data (2016)

3.12 Ethical Considerations

The researcher ensured that the respondents had informed consent before collecting data. This was in line with Hammersley and Traianou (2012) and Smit (2015) who noted that the studies that involved persons must ensure that the participants have informed consent in regards to the observation of the safety, uphold privacy, respect, autonomy and fair treatment. The respondents were briefed on the purpose of the study, the process to be used and the gains of the research. The researcher informed the participants that they were free to withdraw from the study at any point during the process of the study without coercion. To ensure the respondent's anonymity, they were not allowed to use their names, those of their schools, or stamps anywhere on the questionnaire. They were informed that the pseudo names or codes were used for their identity. The researcher sought permission from the pre-primary school parents and the Sub County ECDE supervisors to group them and then administer the conversation by noting down the notes and tape recording the conversation to make the conclusions of the study with ease.

CHAPTER FOUR

FINDINGS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents the findings and interpretation of the study. The chapter has been sub-divided into sections and subsections. The demographic information of the respondents such as gender, age, experience, and the highest level of education for the public pre-primary school teachers, head teachers, parents, and the Sub County ECDE supervisors. After the demographic findings of the study have been discussed the researcher presented the research findings based on the study objectives and research questions. The quantitative data was analyzed using both descriptive and inferential statistics. Descriptive statistics was used to describe and summarize the data in form of graphs, tables, charts, frequencies, and percentages. The Statistical Package for Social Sciences (SPSS) version 20 was used to analyze the quantitative data. The descriptive statistics were used to explore the adequacy of the physical resources, teacher factors, parental participation, and the policy factors influencing on the implementation of psychomotor activities in the public pre-primary school curriculum in Vihiga County. The qualitative data from the parents and the Sub County ECDE supervisors were analyzed in form of narrative and prose form.

The following objectives of the study were used to guide the data analysis and their interpretation;

- i. To find out the adequacy of the physical resources influencing the implementation of learners' psychomotor activities in the public pre-primary school curriculum in Vihiga County.

- ii. To establish the teacher factors influencing the implementation of learners' psychomotor activities in the public pre-primary school curriculum in Vihiga County.
- iii. To examine the parental participation influencing the implementation of learners' psychomotor activities in the public pre-primary school curriculum in Vihiga County.
- iv. To determine the policy factors influencing the implementation of learners' psychomotor activities in the public pre-primary school curriculum in Vihiga County.

4.2 Questionnaire Return Rate

The questionnaire return rate is the actual sample that received, filled, and returned the completed questions that are key to the analysis and presentation of data. According to Rowley (2014) response rate is a pivotal element to the researchers who intends to seek reliable and valid results. The response rate remains a critical concern for scholars who seek dependable, valid, and reliable results and a high response rate provides credible findings to stakeholders (Rogelberg & Stanton, 2007; Morton, Bandara, Robinson & Carr, 2012). The population under study comprised 110 head teachers, 110 teachers, 110 parents from all the 110 public pre-primary schools and 12 Sub County ECDE supervisors. From this target population, 33 public pre-primary schools were selected for the actual study in which 33 head teachers, 33 teachers, and 10 parents were selected for the study. Similarly, 12 ECDE supervisors were sampled for the actual study.

Table 4.1, which shows the summary of the Questionnaire return rate of questionnaires from the respondents, reveals that the questionnaires were adequate for the actual study.

Table 4.1: Return rate of the Instruments

Respondents	Number administered	Number returned	Percentage
Head teachers	33	31	93.9
Teachers	33	31	93.9
Parents	10	10	100.0
ECDE supervisors	12	9	75.0
Total	88	81	92.0

Source: Survey data (2016)

Out of the 33 questionnaire administered, 31 (93.9%) of the public primary school head teachers and 31 (93.9%) public pre-primary school teachers returned the instruments for the actual data analysis. On the same note, 10 (100%) of the public pre-primary school parents and 9 (75%) of the ECDE supervisors turned up for the focus group discussion guide. Overall, 92.0% of all the respondents took part in the actual study for the data collection and analysis. This return rate was considered quite satisfactory for the analysis, triangulation and generalization of the findings of the study. In line with several scholars, among them is Oso and Onen (2011) agree that the acceptable response rate for the entire administration of the survey instruments should be above 80%. The high instrument return rate was achieved because the researcher personally administered the instruments and observed the ethical issues. The high instrument response rate is in agreement with Zikmund, Babin, & Griffin (2013) opines that a response rate of 50.0% and above is considered adequate for the generalization of the study. Thus, this study concluded that the actual sample for the study was within the acceptable range and therefore appropriate for the representative and the generalization of the study population.

4.2.1 Demographic information of the respondents

The study sought to gather the demographic information of the head teachers, teachers, parents and ECDE supervisors. The demographic information included variables of years of experience, age, and gender. The participants' demographic information was important to understand the respondents who responded to the research tools and used to establish the validity of data sources.

4.2.2 Gender of the teachers

The study sought to establish the distribution of the public pre-primary school teachers in terms of their gender. This information was regarded as important because both males and females should be treated equally by accessing teaching positions in the public pre-primary school to encourage and motivate both boys' and girls' educational attainment without any discrimination. This is shown in Table 4.2 below.

Table 4.2: Gender of the teachers

	Frequency	Percent	Cumulative Percentage
Male	11	35.5	35.5
Female	20	64.5	100.0
Total	31	100.0	

Source: Survey data (2016)

The findings of the study show that most of the public pre-primary teachers in Vihiga County were females. As indicated in Table 4.2, it was evident that nearly two-thirds [64.5% (20)] of the teachers who took part in the study were females, only 35.5% (11) of them were males. This finding confirms the generally held belief that female teachers dominate ECDE teaching. This could also be explained by the fact that pre-primary

schoolteachers are not employed by the Teachers Service Commission as their colleagues in primary and secondary schools with better terms and schemes of service and therefore not enthusiastic about the ECDE training and taking other professional-related courses. Falaye & Adams (2008) established that pre-primary school gender and the type of school have a great significant influence on learners' decisions on career succession and choice.

4.2.3 Gender of the head teachers

The study sought to establish the distribution of the public primary school head teachers in terms of their gender. This information was regarded as important because both males and females should be treated equally by accessing leadership positions in schools to motivate both boys and girls as regards future career choices and progression. This is shown in Table 4.3.

Table 4.3: Gender of head teachers

Respondent	Frequency	Percent	Cumulative Percentage
Male	21	67.7	67.7
Female	10	32.3	100.0
Total	31	100.0	

It can be observed from Table 4.3 that most of the primary head teachers are dominated by a male [67% (21)] indicating that they are more aggressive in leadership positions than their female colleagues. This denotes that girl child education should be encouraged by the appointment of more female head teachers to encourage girl child education. Gender balance is determining element that has a positive contribution to learners' performance. This confirms Murakami and Tornsen's (2017) findings that males dominate most

secondary school principals. However, this does not limit principals' performance in administrative roles.

4.2.4 Age of pre-primary school teachers

On the teacher's ages, the findings of the study revealed that most of the public pre-primary schoolteachers in Vihiga County were above forty years of age, as reflected in Table 4.4. Teacher age is an indication of maturity, level of training completion, tolerance, and wisdom to teach and handle the public pre-primary school learners' curriculum.

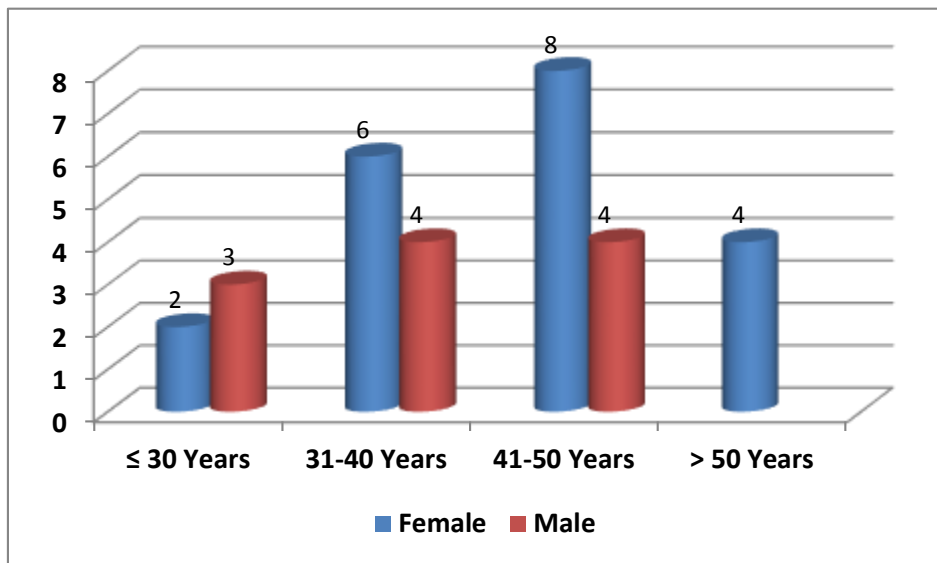
Table 4.4: Distribution of pre-primary school teachers' age

Age	Frequency	Percentage	Cumulative percentage
≤ 30 Years	5	16.1	16.1
31-40 Years	10	32.3	48.4
41-50 Years	12	38.7	87.1
>50 Years	4	12.9	100.0
Total	31	100.0	

Source: Survey data (2016)

Table 4.4 shows that a substantial proportion [38.7% (12)] of the public pre-primary school teachers who took part in the study were in the age group of 41-50 years, while those who were in the age group of above 50 years were the least represented at only 12.9% (4). Slightly less than a third [32.3% (10)] of the public pre-primary school teachers who participated in the study were 31-40 years of age, while 16.1% (4) of them were at least 30 years of age. This is shown in Figure 4.1 below.

Figure 4.1: Age and gender distribution of the teachers



Source: Survey data (2016)

From Figure 4.1 above, the findings of the study further show that there was a skewed distribution of gender given the age of the teachers who took part in the study. For example, all (4) of the public pre-primary school teachers who were over 50 years old were females, with the majority 60.0% (3) of them aged 30 years and below being males and in the age groups of 31-40 years. The age bracket of 41-50 years that formed the bulk of female public pre-primary schoolteachers is a mature and elderly age that is associated with patience, encouragement, loving and parental tender care to efficiently handle the education of preschool learners. According to UNESCO (2012), teachers' age is perceived as important because it indicates the general measure of experience and maturity in handling learners' education.

4.2.5 Age of head teachers' respondents

Head teachers were asked to provide their age because it is a factor in the pupil's performance and administrative roles. This is shown in Table 4.5.

Table 4.5: Distribution of head teachers by age

Age	Frequency	Percentage	Cumulative percentage
≤ 30 Years	0	0.0	0.0
31-40 Years	1	3.2	3.2
41-50 Years	17	54.8	58.0
>50 Years	13	42.0	100.0
Total	31	100.0	

Source: Survey data (2016)

The findings show that most head teachers [17 (54.8%)] are within the age bracket of 41-50 years. This is a mature age with adequate experience of administrative duties to understand the needs of learners' participation in the psychomotor activities. This also indicates that most head teachers were in their active years of administration and therefore could actively participate in school management change especially enhancing pre-primary school learners' psychomotor activities in the curriculum. This result supports Okumbe (2001) that a young employee has more aspirations and expectations that an organization cannot meet.

4.2.5 Educational level of the public pre-primary schoolteachers

The study sought to investigate the educational levels of the public pre-primary schoolteachers who participated in the study. The knowledge of their level of education was considered vital for the study; the educational level of the respondents was considered key to the understanding of the public pre-primary schoolteachers on the implementation of the psychomotor activities in the curriculum. In addition, the

educational level of the public pre-primary school teachers was asked in view to determine their extent of competence acquired through training on psychomotor activities. Their level of education is summarized in Table 4.6.

Table 4.6: Educational level of the teachers

Education/professional	Frequency	Percentage
Untrained	5	16.1
Certificate in ECDE	16	51.6
Diploma in ECDE	8	25.8
University degree	2	6.5
Total	31	100.0

Source: survey data (2016)

The teacher's level of education reveals that more than half, (51.6%) 16, of the public pre-primary schoolteacher respondents, were holders of certificates in public pre-primary schools. It was also established that a respectable proportion of the teachers in Vihiga County had a diploma certificate in the ECDE; this was observed by 25.8% (8) of the public pre-primary schoolteachers who took part in the study. However, the findings of the study show that only 6.5% (2) of the public pre-primary schoolteachers who participated in the study held degrees in education. On the other hand, it was established that 16.1% (5) of the public pre-primary schoolteachers were untrained. The finding of the study reveals that most of the teachers were professionally trained to effectively facilitate the implementation of the learners' psychomotor activities in the public pre-primary school curriculum. The indication of more trained ECDE teachers is

inconsistence with Garcia, Pence & Evans (2008) who assert that most preschool teachers are untrained.

4.2.6 Educational level of the head teachers' respondents

Head teachers were asked to provide their level of education. The educational level was deemed important because it determines their understanding of the management and implementation of the psychomotor activities in their school curriculum. Ewetan & Ewetan (2015) established that teacher characteristics such as educational level influence students' performance in curriculum activities. Their level of education was summarized in Table 4.7.

Table 4.7: Educational level of the head teachers' respondents

Education/professional	Counts (n=31)	%
Certificate (PI)	13	41.9
Diploma	6	19.4
University degree and above	12	38.7
Total	31	100.0

Source: survey data (2016)

The finding reveals that most of the head teachers 13 (41.9%) were PI certificate holders. It was further revealed that a respectable percentage of the head teachers in Hamisi Sub-county were degree holders as confirmed by 12 (38.7%) who participated in the study. This finding reveals that head teachers in Vihiga County had the requisite educational qualifications to initiate learners' psychomotor activities in their schools. The level of

education establishes that the head teachers understand the pre-primary school curriculum for the implementation of the learners' psychomotor activities by the teachers.

4.2.7 Teachers' years of experience

The study sought to establish the number of years the teachers had worked in the public pre-primary school. The knowledge of the level of experience of the teachers was considered important for the study because experience is an integral aspect of the teacher factor that influences the implementation of the learners' psychomotor activities in the public pre-primary school curriculum. This is shown in Table 4.8.

Table 4.8: Years of Experience among the public pre-primary school teachers

Education	Counts (n=31)	Frequency %	Cumulative (%)
≤ 3 Years	7	22.6%	22.6%
4- 6 Years	9	29.0%	51.6%
7- 9 Years	10	32.3%	83.9%
≥ 10 Years	5	16.1%	100.0%
Total	31	100.0%	

Source: Survey data (2016)

The findings of the study show that the majority of the public pre-primary school teachers in Hamisi Sub-County had an experience of under 10 years, as indicated in Table 4.5 which shows the summary of the number of years the respondents had served as public pre-primary school teachers. It was established that 32.3% (10) of the public pre-primary school teachers who took part in the study had an experience of 7-9 years and more than half [51.6% (9)] of them had any experience of fewer than six years as public pre-primary

school teachers. Only 16.1% (5) of the public pre-primary school teachers in Vihiga County had the experience of ten years and above, as reflected by the sample public pre-primary school teachers. The findings imply that most of the public pre-primary school teachers had the required skills and experience to improvise, provide, maintain and implement the public pre-primary school learners' psychomotor activities in the curriculum. It can be postulated that public pre-primary school teachers with long experience could initiate and facilitate the policies that provide learners with credible opportunities to actively participate in psychomotor activities. The findings indicated that the public pre-primary school teachers had adequate experience deemed necessary in the teaching of psychomotor activities. The findings concur with Hedlin & Åberg (2013) in Sweden and Turkey who established that there existed more experienced female public pre-primary school teachers than males.

4.2.8 Head teachers' working experience

The study sought to establish the number of years that the head teachers had worked in the position of leadership. The head teacher's experience is pivotal because experience is considered the integral aspect of the administrative and management element that influence the implementation of psychomotor activities in the pre-primary school curriculum. This is consistent with Akinsolu (2010) who note that teacher experience influences students' performance. However, Yara and Surumo (2012) had a contrary finding that teacher experience had no positive significant influence on the learners' academic outcomes. This is shown in Table 4.9.

Table 4.9: Head teachers' years of experience

Education	Counts	Frequency %	Cumulative (%)
≤ 3 Years	2	6.5%	6.5%
4- 6 Years	6	19.4%	25.9%
7- 9 Years	9	29.0%	54.9%
≥ 10 Years	14	45.1%	100.0%

Source: Survey Data (2016)

The findings from Table 4.9 indicate that a large proportion of the head teachers 14 (45.1%) in Vihiga County have an experience of 10 years and above. The study further reveals that all the head teachers had a working experience of more than three years, which is adequate to help the teachers to implement the psychomotor activities in their public pre-primary school curriculum. Adeyemi (2008) states that teacher experience is significantly related to the learner's academic attainment. However, results of Ayodele and Ige (2012) revealed that teacher's experience had no significant influence on the students' educational performance.

4.2.9 Demographic information of public pre-primary school parents

The study sought to investigate the pre-primary school parents. This information was deemed necessary because the study sought the type of parents that are found in the public pre-primary schools and how they influence the implementation of the learners' psychomotor activities in the curriculum. This is tabulated in Table 4.10.

Table 4.10: The gender and education level of the parents

Gender	Frequency	Percentage
Male	2	25.0
Female	8	75.0
Total	10	100.0
Level of education		
Tertiary institution	1	10.0
Secondary	4	40.0
Primary	5	50.0
Total	10	100.0

Source: Survey Data (2016)

It can be deduced from Table 4.10 that a majority of the parents 8 (75%) were female in contrast to the male 2 (25%). This depicts that most public pre-primary schools' parents are female-dominated in the representation on the School Board of Management during parents' meetings. It can further be noted that male parents take a limited interest in the education of pre-primary schoolchildren. The result is in contrast with Erdem (2018) who asserts that children feel proud and secure with their educational performance when their parents are actively involved in psychomotor activities. The finding also supports Kipkemei (2012) whose study established that parents play a minimal role in ensuring that children acquire social, physical, emotional, and mental skills.

The finding revealed that all of the parents 10 (100%) are literate with the basic education and +being certificated in primary education. This implies that all the parents can support the implementation of the learners' psychomotor activities in the pre-primary school curriculum. The finding is in line with Bodrova & Leong (2015) who affirms that most parents are not greatly involved in their children's education at home for the

implementation of psychomotor skills due to the habit of the children watching the television, videos, playing with the computer devices. The finding contrast that of Mwamwenda (2014) in Tanzania who reports that parents are more concerned with the academic achievement of their children than the psychomotor attributes. However, the finding does not agree with that of Andieme (2020) whose study established that most pre-primary schoolchildren were not actively engaged in psychomotor and creative activities because their parents emphasized the cognitive abilities of their children's education.

4.2.10 Demographic information of ECDE Supervisors

The study sought to explore the demographic information of ECDE Supervisors who took part in the study. Their views were considered very important in the findings of this study because they are directly involved in supervising and preparing the teachers for tasks, hence information on their demography was necessary. The findings correspond with those of Thuku (2017) who established that the respondent's bio-data information on; age, gender, academic qualifications, and professional and work experience has an advanced effect on learner's educational achievement. The participants' demographic information is represented in form of frequencies and percentages as summarized in Table 4.11

Table 4.11: ECDE Supervisors' bio-data

Gender	Frequency	Percentage
Male	2	22.2
Female	7	77.8
Total	9	100.0
Age (Years)		
≤ 30 Years	0	00.0
31-40 Years	1	11.1
41-50 Years	3	33.3
≥ 50 Years	5	55.6
Total	9	100.0
Level of education		
Diploma in ECD & Below	2	22.2
Degree in ECD	4	44.4
Postgraduate in ECD	3	33.4
Total	9	100.0
Experience		
≤ 4 Years	1	11.1
5- 9 Years	3	33.3
≥ 10 Years	5	55.6
Total	9	100.0

Source: Survey data (2016)

The findings of the study, as shown in Table 4.11, reveal that there was a disproportionate distribution of ECDE supervisors in terms of gender in Hamisi Sub-County. The results of exploratory data analysis of the teacher trainers' demography indicate that a significant majority [77.8% (7)] of the ECDE supervisors who took part in the study were females, and only 22.2% (2) of them were males. This finding resonates with the earlier fact that most of the ECDE teachers in Hamisi Sub-county are females.

This means that male preschool children were least motivated during play activities. The findings support Mbithi (2017) that 56.4% of teachers in Machakos County are females.

It emerged that on their ages, a majority of ECDE supervisors 5 (55.6%) that were sampled for the studies were in the age group of between 50 years and above. Only 33.3% (3) of them were aged between 41-50 years, and 11.1% (1) were aged 40 years and below. It can therefore be deduced that most of the ECDE supervisors had an active supervisory age or years of life to oversee the implementation of the preschool curriculum to provide the chance for pupils' participation in psychomotor activities. The findings concur with those of Okolo (2001) who established that age differences do not influence head teachers' administrative performance.

The study sought to establish the ECDE supervisors' respondents' level of education. The level of education of the teacher supervisors was deemed an important aspect of the quality of overseeing and advising regarding imparting the right knowledge and skills relevant to the implementation of outdoor activities in the curriculum. Therefore, on a scrutiny of the data on their level of education the findings of the study show that those who had degrees in ECDE 4 (44.4%) formed a majority of teacher supervisors who took part in the study, while 3 (33.3%) postgraduate degree in ECDE. Those who held diploma certificates only formed a fifth [22.2% (2)] of the teacher supervisors who took part in the survey. The findings show that the respondents had adequate supervisory qualifications to implement preschool play activities in Hamisi Sub County. This confirms Eyike (2001) who agrees that teachers with adequate training were more successful in learners' improved academic performance than those with limited training.

The study also sought to establish the participants 'years of experience as ECDE supervisors, given that this information was considered key to the quality of response that was expected to be received for the study. On a close examination of their level of education, the findings of the study show that a marginal proportion [11.1% (1)] of the respondents had the experience of not more than four (≤ 4) years. Those who had experience of ≥ 10 years formed a large proportion of 55.6% (5) of the ECDE supervisors who took part in the study; while a third of the 3 (33.3%) had experience of 5-9 years. The findings conclude that preschool supervisors in Hamisi Sub County had sufficient experience in the execution of play activities among preschool learners. This support the findings of Ng'asike (2004) whose study on the use of play activities by mathematics teachers established that teacher experience enabled them to effectively provide child-centered pedagogical methods that enhanced high scores performance in examinations.

4.3 Teacher factors influencing learners' implementation of psychomotor activities

The first research objective was to investigate on influence of teacher factors' on implementation of psychomotor activities in the public pre-primary school curriculum in Vihiga County. This objective of the study was investigated using a pre-designed questionnaire that explored the constructs of teacher factors that were considered to affect the implementation of outdoor activities. The questionnaire was Likert-scaled type statements, in which the lead teacher respondents were to choose from a 5-point score of; Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), and Strongly Disagree (D). From their responses, the researcher computed percentage frequencies of their responses on various items,

4.3.1 Influence of teacher factors on learners' implementation of the psychomotor activities

Teachers were asked to provide their responses on teacher factors that influence the implementation of psychomotor activities in the pre-primary curriculum. This information was considered important because teachers are the engines behind the actual implementers of psychomotor activities in schools. This was tabulated as shown in Tables 4.12.

Table 4.12: Teacher factors on learners' implementation of psychomotor activities

Item	SA	A	U	D	SD
Pre-school teacher training is mostly academically oriented, which neglects young children's need for exploration and free play.	9 (29.0%)	8 (25.8%)	5 (16.1%)	7 (22.5%)	2 (6.5%)
There is too much teacher-initiated instruction, which stifles the learners' interests and interferes with self-initiated play learning.	7 (22.6%)	5 (16.1%)	3 (9.7%)	9 (29.0%)	7 (22.6%)
I concentrate on academically oriented programs at the expense of the psychomotor activities.	11 (35.5%)	6 (19.4%)	2 (6.5%)	5 (16.1%)	7 (22.6%)
I have negative attitudes towards the learners' play, though I know it is an important aspect of learning.	14 (45.2%)	6 (19.4%)	3 (9.7%)	4 (12.9%)	4 (12.9%)
After training, teachers develop a negative attitude towards play but focus on academics to attract and be retained by school owners.	13 (41.9%)	5 (16.1%)	3 (9.7%)	4 (12.9%)	6 (19.4%)
More practical play activities be incorporated into teacher training.	12 (38.7%)	8 (25.8%)	4 (12.9%)	4 (12.9%)	4 (12.9%)
The role of teachers is influenced by teachers' training, attitude, motivation, and remuneration.	13 (41.9%)	5 (16.1%)	3 (9.7%)	4 (12.9%)	6 (19.4%)

I understand the importance of play in learning.	10 (32.2%)	12 (38.7%)	0 (0.0%)	5 (16.1%)	4 (12.9%)
I sometimes use play as punishment for wrongdoing and make the play look punitive.	10 (32.2%)	6 (19.4%)	3 (9.7%)	8 (25.8%)	4 (12.9%)
I consider playing a less effective method for teachers.	9 (29.0%)	7 (22.6%)	2 (6.5%)	8 (25.8%)	5 (16.1%)
My age influences my participation in play activities.	7 (22.6%)	8 (25.8%)	5 (16.1%)	5 (16.1%)	6 (19.4%)
My gender influences my participation in psychomotor activities.	14 (45.2%)	9 (29.0%)	1 (3.2%)	3 (9.7%)	4 (12.9%)

The findings of the study show that although the public pre-primary teachers agree that psychomotor play activities are important in fostering the learners' mental, physical, social, emotional, and creative growth during educational processes, its implementation in the pre-primary school curriculum in Vihiga County is still far from being achieved. For instance, a significant majority, 70.9% (22) of the pre-primary lead teachers who were sampled for the study generally accepted most teachers understand the importance of play in learning. The study observed that psychomotor activities were not implemented according to the schedule timetable in most public pre-primary schools. A further observation established that most teachers emphasized on academic-oriented activities than the psychomotor activities. The study noted that most teachers had the appropriate qualifications and prepared their professional records on a daily basis for implementation of the psychomotor activities. However, the actual implementation was wanting. A focus group discussion with parents established that most of them wanted their children to excel in academic examination performance than the psychomotor activities. Most parents reported that because of their low-income status, they could not afford to enroll their children in the expensive private pre-primary schools that are

known for excellence examination performance. These findings concur with Heather, Melinda, Ahn, and Fedewa (2014) and Park and Riley (2015) who agree that some global studies have not only recognized the importance of play on children's health and growth but also the multiple roles of play on children learning outcomes.

However, 64.6% (20) of them confirmed that they had negative attitudes towards outdoor psychomotor activities, though they knew it was an important aspect of learning. They argue that participation in the psychomotor activities was viewed as a waste of important time for both the teacher and the learners. It was observed that most public pre-primary school teachers were ageing and stayed away from the play fields to facilitate the implementation of the learners psychomotor activity curriculum. I was further observed that most parents had not provided learners with uniform for the psychomotor activity in the play fields. This was corroborated with one of the ECDE supervisors in FGD 3 who had this to say, *“Aged teachers do not value play activities because parents demand for academic excellency instead of the play activity that is necessary for nurturing learner’s talents and abilities for future self-reliance.”* This study concurs with the assertion by Lewin (2007) who notes that doing the same thing repeatedly like class repetition is boring. The findings of Lester and Russel (2008) also corroborate that evidence of minimal time allocated to play activities exists at the expense of an examination-oriented curriculum.

From the findings of the study, it was discovered that most pre-primary school teachers tend to concentrate more on academically oriented programs that are indoor than the expense outdoor psychomotor activities. This was reflected by 35.5% (11) of the public pre-primary school teachers who took part in the study who strongly agreed with the

researcher's assertion that some preschool teachers concentrate more on academic work than play activities. Only about a fifth, 22.6% (7), of the preschool teacher respondents negated the claim that more time is spent on academic work than psychomotor activities.

One of the ECDE supervisors in SFGD 1, had this to say;

"In some schools, head teachers say that parents complain of learners who complete preschool yet are not academically endowed to either read or do simple arithmetic. These, therefore, imply that teachers utilize psychomotor time allocated on the timetable for academically oriented lessons, more so Physical Education and even break time (SFGD, 1).

A further probe with parents indicated that they want their children to excel in academic-oriented activity areas to take some of the best-coveted courses such as medicine, pilot and law but not games and sports that easily erode with increased age. The sentiments above agree with Saide (2009) who noted that certain subjects are taught in schools at the expense of others. Similar findings of Elkind (2008), posit that play is no longer valued in educational activity areas.

It came out from the results of the survey that, although a considerable proportion of the preschool teachers who participated in the study alluded that preschool training gives equal time in academics and outdoor activities, a sizeable proportion of them agree that most ECDE teachers develop negative attitudes towards outdoor activities thereafter. This point of view was reflected by more than a quarter, 29.0% (9); of the pre-primary school teachers who vehemently refuted the researcher's assertion that preschool teacher training is mostly academically oriented and neglects young children's needs for exploration and free play. This finding was corroborated with one of the ECDE supervisor who reiterated that most pre-primary school teachers who are aged have

negative attitude towards psychomotor activities because they seem to demoralize during implementation of the curriculum. One of the parent in PFGD 3, reported, *“I do not want my child to participate in the play activity because of his safety.”* This implies that lack of safety precautions during implementation of the learner’s psychomotor activities had a negative attitude in teachers and parents. This finding is in line with Scott and Gough (2003) who claim that teacher training during pre-service should stress psychomotor activity teaching and learning while Fisher (2001) argue that teacher professional development initiatives that aim to accredit outdoor play activities should be stressed because it leads to improved teacher repertoire and learner’s educational achievement.

However, it came out clearly from the findings of the study that after training, some ECDE teachers develop a negative attitude toward play and do concentrate more on academic work to give a good academic performance to attract and retain more children in the learning centers. Nonetheless, nearly two-thirds 64.5% (20) of the lead teachers who were sampled for the study agreed that more practical play activities should be incorporated into teacher training, to enhance the teachers’ skills, knowledge, and attitudes in play learning among the ECDE learners. The findings confirm Saide (2009) who postulated that teachers should act as role models and guide in the process of teaching and learning through literacy-related play activities for the effective implementation of the pre-primary school curriculum.

Further, it emerged from the results of the survey that some teachers use play as punishment for wrongdoing and therefore make the play look punitive and arduous activity. This was indicated by slightly more than a half, 51.6% (16), of the public pre-primary school teacher respondents who confirmed that some of them use some play as a

form of punishment. This deters the positive incorporation of outdoor play activities in the ECDE curriculum. The finding concurs with that of Wangare (2010) who concluded that some teachers used play as punishment for wrongdoing among the learners. The study recommended that because this kind of punishment instills fear, anxiety, resentment, and hostility towards schooling, it should, therefore, be avoided.

However, another group [22.6% (7)] of the public pre-primary schoolteachers who took part in the study who said that teachers do allow ECDE learners to indulge in outdoor activities, held a general perception that sometimes there is too much teacher-initiated instruction, which instead stifles the learner's interests and interferes with self-initiated play learning. This is contrary to the generally held belief that for outdoor play activities to be meaningful, the teacher should only guide, provide suitable equipment and ensure the safety of children. Most ECDE supervisors' reported lack of adequate play equipment and materials that deters teacher's participation in the implementation of learner's psychomotor activities. Minimal teacher participation during implementation of learner's psychomotor activities is further compounded with inadequate teacher staffing and lack of policy guidelines on teacher remuneration. The teacher should be present during the playing only to supervise, give direction, give guidance, identify, nurture talent and take precautionary measures to avoid injuries. The teacher should give opportunity for the learners to explore and exhibit their creativity and innovativeness. These findings are in line with Saide (2009) who stated that during children-related play activities, the teacher's role is to act as a role model and guide in the process of teaching and learning through literacy-related play for effective curriculum implementation in early childhood centers.

On the flip-flop, the findings of the study revealed that the majority 58.0% (18) of the public pre-primary school teachers who took part in the study affirmed that the role of the teacher is highly influenced by teacher characteristics such as teacher training, attitude, motivation, and remuneration. This was in line with one of the ECDE supervisors in SFGD 2, who reiterated, *“Most of the public pre-primary school teachers are demotivated to participate in psychomotor activities as a result of unclear policy guidelines on their terms of service or employment compared to those teachers with similar academic and professional qualifications under the teachers’ service commission.”* This confirms the belief that public pre-primary school teachers are demotivated to embrace their professionalism to nurture learner’s talents, abilities, and move from academic-oriented system of education. This confirms the findings of Gaunlett et al. (2010) that the lack of teachers use of playwrights is because of unavailability and inadequate play facilities such as; recreation facilities, physical infrastructure, and play equipment in preschools.

Additionally, the age and gender of the ECDE teacher were established to have bearing on the teacher's inclination to use outdoor activities. For instance, slightly more than one out of every two lead teachers who were surveyed for the study agreed that teachers' age affects their participation in outdoor activities. On the same note, about three quarters, 74.2% (23), of the public pre-primary school ECDE teachers’ respondents were also convinced that teachers' gender affects teachers' participation in outdoor activities. Only 35.5% (11) of the public pre-primary schoolteachers negated the claim that the age and gender of the ECDE teacher affect his/her incorporation of outdoor activities into the ECDE curriculum. The study established that most public pre-primary school teachers

were female and aged to enable implementation of learner's psychomotor activities curriculum. One of the ECDE supervisors in SFGD 1 argued, "*Male pre-primary school teachers do not consider playing with young children in the fields as it is viewed as embarrassing and therefore, left to the female teacher.*" This finding implies that it is important for preschool teachers to understand the role of various outdoor play and physical activities and be able to select suitable ones appropriate for their learners' varied ages. Another ECDE supervisors retorted:

"Long ago, sometimes back, the physical activities were seriously taken. Somehow, this is no longer the case. The older teacher tends to get bored with repeated activities of jumping up and down with children especially considering old age, family commitments, and emerging health complications, SFGD, 2"

Another supervisor also cited age and tiredness. The respondent reasoned that it is not wise to keep on jumping in the field with kids when there were younger teachers who should jump with learners. The findings are consistent with Ng'asike (2014) and Kingi (2018) who established that teachers' age, gender, academic qualifications, and work experience are significantly related to the learner's educational performance.

4.3.2 Head teacher's response on teacher factors on implementation of learners' psychomotor activities

Head teachers were required to provide their responses on teachers' factors that influence the implementation of psychomotor activities in the ECDE curriculum because the public pre-primary schools are within the primary compound and at times provide the psychomotor facilities and equipment. Their response is shown in Table 4.13.

Table 4.13 : Head teachers' response on teacher factors influencing implementation of learners' psychomotor activities

Item	SA	A	U	D	SD
Teachers ensure learners participate in psychomotor activities	4 (12.8%)	10 (32.3%)	3 (9.7%)	11 (35.5%)	3 (9.7%)
Teachers have positive attitudes toward psychomotor activities	2 (6.5%)	5 (16.1%)	4 (12.8%)	15 (48.4%)	5 (16.1%)
A teacher's age affects participation in psychomotor activities	20 (64.5%)	7 (22.6%)	0 (00.0%)	4 (12.8%)	0 (00.0%)
Teachers' gender affects participation in psychomotor activities	19 (61.3%)	8 (25.8%)	0 (00.0%)	3 (9.7%)	1 (3.2%)

Source: Survey Data (2016)

It is noted from the Table that most head teachers 11 (35.5%) agree that teachers do not take their learners to participate in psychomotor activities. Learners' failure to participate in psychomotor activities does not prepare them for physical, mental, and social development. It, therefore, means that learners in Vihiga County do not take part in outdoor activities. This finding was supported by the observation that noted teachers implementing learner's psychomotor activities without the practical aspect of learning. Another parent had held that *"I can only provide academic assistance to my child but not activities that require play."* This means that parents are obsessed with their children's academic performance at the expense of psychomotor activities. The study findings are

congruent with Lillian (2010) who opines that outdoor play activities were a waste of learners' time and concentrated on learners' academic attainment.

It is also deduced from the findings that a large proportion of head teachers 15 (48.4%) in Vihiga County had the perception that teachers had a negative attitude towards the implementation of psychomotor activities in the pre-primary curriculum. This may be attributed to inadequate physical facilities and equipment that facilitates outdoor activities. The public pre-primary school teachers age and poor remuneration by the County government may be another attributing factor as one of the ECDE supervisors retorted:

“Most of these teachers are not employed by the county of Vihiga. However, the few who are lucky to be employed are not well paid by the county government and therefore concentrate on indoor activities, SFGD, 2.”

Another parent revealed that providing play materials and equipment is a milestone because of low-income status. This is what the parent retorted: *“How can do i provide play materials and equipment when I am unable to meet the daily basic needs (PFGD, 2.”* The finding confirms the inability of parents to support the implementation of learner's psychomotor activities. The finding is in line with the findings of Achieng (2010) who assert that most teachers emphasized more on indoor academic activities more than outdoor play activities.

Most head teachers 20 (64.5%) from the findings agree that the age of pre-primary school teachers affects their involvement in psychomotor activities. The researcher also observed that older teachers generally did not participate in outdoor activities. Only a few

younger teachers seemed to take children in outdoor activities. One excerpt from the focus group discussion opined,

“Teachers do not bother to purchase outdoor clothing and even the children themselves did not have them adequately throughout the year. A few who transfer from urban pre-schools come along with some track suits, SFGD 1.”

This confirms Nannyonjo (2007) study that teachers’ age influences learners’ outcomes. Another representation of the head teacher's response 19 (61.3%) agreed that gender negatively influenced teacher's participation in psychomotor curriculum implementation. Most female teachers seem to shy away from outdoor activities because they do not consider them meaningful to learners' educational attainment. One of the ECDE supervisors had this to say,

“Most ECDE teachers are females. Some of them have a negative attitude towards Outdoor and Psychomotor Activities, SFGD 3.”

"The finding concurs with that of Nannyonjo (2007) who established that teachers’ gender, age, and experience influences learners’ outcomes.

The study also tested for the following null hypothesis:

H₀₁: There is no significant difference between teacher factors and the implementation of the learners’ psychomotor activities in the public pre-primary schools’ curriculum in Vihiga County.

The hypothesis was tested using inferential statistics, ANOVA to establish the relationship that existed between teacher factors and learners’ implementation of psychomotor activities in the public pre-primary school curriculum. The finding is represented in Table 4.14.

Table 4.14: ANOVA testing on teacher factors influencing learners' implementation of psychomotor activities

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7181.808	6	1196.968	2.552	.000
Within Groups	6481.183	25	259.2473		
Total	13662.991	31			

Source: Survey Data (2016)

From Table 4.14, it can be deduced that $\{F(6, 25) = 2.552, p = .000\}$. Thus, the p-value was 0.000 that was less than the acceptable 0.05 significance level. Hence, the null hypothesis was rejected and the alternative hypothesis accepted that there is a significant difference between teacher factors and the implementation of the learners' psychomotor activities in the public pre-primary schools' curriculum. The finding confirms Johnas (2013) whose study concluded that there was a significant relationship between teachers' use of play activities and learners' test scores.

4.4 Influence of physical resources on learners' implementation of psychomotor activities

The second objective of the study was to find out the influence of physical resources on learners' implementation of the psychomotor activities in the curriculum. This objective was explored by analyzing responses solicited from the public pre-primary school teachers on the construct of the selected physical resources deemed to influence learners' implementation of the psychomotor activities in the curriculum. Some of the specific areas that were investigated include; teachers' participation in the outdoor activities, the general condition of outdoor apparatus in the ECDE centers, and the availability of

outdoor activities. Their views were sought in the specific areas by use of questionnaires administered to ECDE lead teachers.

4.4.1 Teachers' participation in the psychomotor activities

The study sought to investigate how the teachers participate in the psychomotor activities in the public pre-primary schools within Vihiga County. Their participation was indicated by the frequency in which they took their ECDE learners for outdoor play activities and the level of physical involvement of the teachers in the activity. The public pre-primary schoolteachers' response on the frequency of how the preschoolers took physical activities per week and their involvement in the activities was as in Table 4.15.

Table 4.15: Teachers' response to participation in the psychomotor activities

Statement	Never	Rarely	occasionally	Always
How frequently do you take your preschoolers for psychomotor activities per week?	5 (20.8%)	8 (33.3%)	5 (20.8%)	6 (25.0%)
Do you take part in playing along with your learners as they play?	10 (41.7%)	9 (37.5%)	4 (16.7%)	1 (4.2%)

Source: Survey data (2016)

The results of the survey indicate that only a quarter [25.0% (6)] of the public pre-primary schoolteachers who took part in the study confirmed that they always take their learners for the psychomotor activities. A considerable majority of the public pre-primary school learners were rarely allowed to participate in outdoor play activities, as was revealed by 33.3% (8) of the public pre-primary schoolteachers who accepted that they rarely expose their learners to outdoor activities as required by the curriculum. However, about a fifth [20.8% (8)] of the public pre-primary school teachers who were sampled for

the study alluded that they occasionally take their learners for physical activities once a week. It emerged from the results of the survey that about one out of every five, 20.8% (8), of the public pre-primary school teachers who participated in the study, revealed that they had never taken their learners out for playing learning activities. The study established minimal participation of the learner's in the psychomotor activities. A follow-up conversation with the ECDE supervisors revealed this, "*Age and gender determines the public pre-primary school teachers participation in the psychomotor activities, SFGD, 2.*" This implies that most teachers rarely take their learners' to participate in the psychomotor activities as the curriculum demands. The findings confirm with Howard (2007) who affirms that in the USA, children's time for play has drastically reduced. Additionally, Elkind (2007) also attests that the right to children's play activities has become a luxury.

In addition, it was established that although some teachers take their learners for outdoor play activities, many of them do not fully get involved in the play. This was revealed by 41.7% (10) of the public pre-primary school teachers who agreed that they never take part in playing along with their learners as they play. Only 4.2% (1) of them alluded that they always join their learners in outdoor play learning, but 37.5% (9) indicated that they rarely participate in outdoor playing activities. One ECDE supervisors respondent said the following excitedly,

"Our teachers do not take part in outdoor play activities with the children in the field. They only let children play on either free play activities or football on their own. Some learners nowadays carry their own home made balls to play in the fields when time allows, SFGD 2."

These findings, therefore, imply that the outdoor activities done by the ECDE teachers in most of the public pre-primary schools in Vihiga County were quite inadequate given the ECDE curriculum. Despite the ECDE curriculum program that requires all preschool learners to enjoy learning through play and that play should appear in their daily activity timetable, several teachers still deny their learners the opportunity to adequately indulge in outdoor play activities. The findings affirm Carrier, Thomson, Tugurian and Stevenson (2014) and Mirka (2014) studies that revealed that outdoor class activity has been hindered by policy guiding curriculum implementation, inadequate learning materials, and teaching staff and Dymont (2008) adds that this makes teachers adapt to indoor classroom teaching and learning.

4.4.2 Availability of the physical resources for the psychomotor activities

The public pre-primary school teachers' views were sought on the availability/adequacy of the psychomotor activities' apparatus in the pre-primary schools within the Hamisi Sub-county. They were asked to rate the adequacy of outdoor apparatus using the scale: None at all (NA), Very inadequate (VA), inadequate (ID), adequate (A), and Very adequate (VA). The availability of adequate play materials and facilities are considered to have an influence on successful play activities to the learners' motivation and enthusiasm during the curriculum implementation. Their responses are summarized in Table 4.16.

Table 4.16: Adequacy of psychomotor facilities in ECDE curriculum

Item	NA	VI	ID	A	VA
Playground	4 (12.9%)	6 (19.4%)	4 (12.9%)	13 (41.9%)	4 (12.9%)
Swimming pool	31 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Rollers	7 (22.6%)	11 (35.5%)	12 (38.7%)	1 (3.2%)	0 (0.0%)
Merry go round	15 (48.4%)	9 (29.0%)	6 (19.4%)	1 (3.2%)	0 (0.0%)
Climbing frames	11 (35.5%)	12 (38.7%)	5 (16.1%)	3 (9.7%)	0 (0.0%)
Swings	10 (32.3%)	8 (25.8%)	8 (25.8%)	5 (16.1%)	0 (0.0%)
Sandpits	7 (22.6%)	12 (38.7%)	8 (25.8%)	3 (9.7%)	1 (3.2%)
Tire tunnels	13 (41.9%)	10 (32.3%)	3 (9.7%)	3 (9.7%)	2 (6.5%)
Wendy houses	23 (74.2%)	5 (16.1%)	3 (9.7%)	0 (0.0%)	0 (0.0%)
Slides	16 (51.6%)	12 (38.7%)	2 (6.5%)	1 (3.2%)	0 (0.0%)
Ropes	0 (0.0%)	7 (22.6%)	5 (16.1%)	11 (35.5%)	8 (25.8%)
Balls	0 (0.0%)	10 (32.3%)	9 (29.0%)	7 (22.6%)	5 (16.1%)
First Aid	3 (9.7%)	4 (12.9%)	10 (32.3%)	8 (25.8%)	6 (19.4%)

Source: Survey data (2016)

The findings of the study show that most public pre-primary schools lacked adequate basic physical apparatus for conducting outdoor play activities. For instance, although 54.8% (17) of the public pre-primary schools' teachers who took part in the study held the view that the playground was adequate in their ECDE centers, a significant proportion [32.3% (10)] others held the view that play grounds in most of the public pre-primary schools were generally inadequate. 12.9% (4) of the public pre-primary school teacher

respondents confirmed that their school did not have a playground. One respondent had this to say:

"These teachers trained in colleges that offered Montessori curriculum. However, after training, there is no single fixed play equipment for children's play apart from the goalless football pitch. Besides, play activity is a problem to implement because ECDE timetable almost coincides with either primary or secondary break time, SFGD 2."

The sentiments above agree with the statement that the absence of play equipment in preschool is like denying the child all its pleasurable experiences (Passer & Smith, 2019; Waithaka, 2010).

This state of inadequacy was replicated in the other outdoor activities apparatus as reflected in both fixed and movable apparatus. It was revealed from the study findings that none of the ECDE centers in Vihiga County had a swimming pool; this was indicated by 100.0% (31) of the public pre-primary schools' teachers who took part in the study. Similarly, the other fixed apparatus for outdoor activities were equally inadequate in most of the pre-primary schools. However, the state of the merry-go-round and climbing frames was worse than the other apparatus. A significant proportion [48.4% (15)] and 35.5% (11) of the public pre-primary schools' teachers who were sampled for the study affirmed that their institutions did not have all merry-go-round and climbing frames, respectively. Further, it was revealed from the findings of the study that although a few public pre-primary schools' teachers alluded that their institutions had merry-go-rounds and climbing frames, the majority of them were in agreement that they were quite inadequate. For example, 48.4% (15) and 54.8% (17) of the respondents confirmed that granting that their centers had a merry-go-round and a climbing frame respectively, were quite inadequate. The findings are in line with those of Tarman and Tarman, (2011) who

indicated that learners can construct their literacy skills if and only if play facilities are readily available and adequate.

On the state of other fixed outdoor activities equipment, the findings of the study revealed that although sandpits and swings were not badly off, tire tunnels and Wendy houses were quite inadequate for outdoor activities in the public pre-primary schools within Vihiga County. It emerged that, whereas 16.1% (5) and 12.9% (4) of the preschool teachers who took part in the study expressed satisfaction with the availability of swings and sandpits in their institutions respectively, nearly three quarters [74.2% (23)] of them indicated that their institutions did not have adequate wendy houses. A few preschool teachers [25.8% (8)] were in general agreement that wendy houses in their centers were quite inadequate and could not appropriately meet the needs of the learners during the outdoor activities. It was discovered that nearly one out of every three (32.3%, 10) and about a fifth (22.6%, 8) of the public pre-primary schools did not have swings and sandpits, respectively as revealed by the preschool teachers who took part in the study.

Further findings show that most public pre-primary schools did not have slides. This was indicated by more than a half, 51.6% (16) of the public pre-primary schools' teacher respondents. However, 45.2% (14) of them who had alluded that their centers had slides, agreed that they were not adequate at all. The state of rollers in the centers was not any better. This was attested by about a fifth, 22.6% (7), of the public preschools' teachers who took part in the study who confirmed that their centers did not have rollers, and about three quarters, 74.2% (23), others who agreed that although they had rollers, they were not adequate in the effective implementation of outdoor play activities within the pre-primary school curriculum.

On the contrary, the findings of the study established that movable apparatus for outdoor activities were adequate in the public pre-primary schools within Vihiga County. For example, more than three out of every six, 61.3% (19), of the public pre-primary schools' teachers sampled for the study confirmed that their centers had adequate ropes for their learners. This was replicated in the availability of balls, where 38.7% (12) of respondents said their centers had enough balls for use during outdoor activities. None of the public pre-primary schools lacked balls. All the same, like other apparatus more balls, were still needed in the public pre-primary schools'. The relatively smaller proportion of 16.1% (5) of the public pre-primary schools' teachers who asserted that they had enough balls; compared to 61.3% (19) others who, though agreeing that they had some balls, insisted that they were not adequate indicated this. One of the parents reinforced this finding by noting that *"Providing play facilities, materials and equipment is not within my reach because as a parent, i value my child to excel in academic areas of the pre-primary school curriculum (PFGD 1)."* This indicates why teachers do not value play activities in contrast to the academic-oriented performance. These findings agree with Zigler and Bishop-Josef (2009) who averred that most preschool learners' education is academic oriented.

On the issue of risk preparedness, the findings of the study established that quite a considerable proportion of the public pre-primary schools' in Vihiga County were ill-prepared. This was revealed by more than half, 54.9% (17), of the public pre-primary schools' teachers who held a feeling that their institutions did not have adequate First Aid kits. About a tenth [9.7% (3)] of them confirmed that their centers did not have First Aid kits. On the contrary, 45.2% (14) public pre-primary schools' teachers' study participants

were satisfied with the adequacy of the First Aid kits, with 19.4% (6) of them strongly asserting that these facilities were adequate. Most parents interviewed held the view that risk preparedness is a factor that make them fear for their children’s’ participation in play activities besides lack of a clear policy on medical treatment in case of an injury. This clearly means that teachers do not value their active participation in implementation of learners’ psychomotor activities.

4.4.3 General condition of the apparatus for the psychomotor activities

On the general conditions of the apparatus for the psychomotor activities, the findings of the study show that the public pre-primary schools’ teachers who participated in the study were divided on their thoughts of adequacy or inadequacy. They were asked to rate the general condition of the outdoor apparatus in your public pre-primary schools using the scale: None at all (NA), Very inadequate (VA), inadequate (ID), adequate (A), and Very adequate (VA). This is shown in Table 4.17.

Table 4. 17: Teacher response on the general condition of psychomotor apparatus

Statement	Very Inadequate	Inadequate	Neutral	Adequate	Very Adequate
In your view, what is the general condition of the outdoor apparatus in your public pre-primary school?	11 (35.5%)	8 (25.8%)	1 (3.2%)	6 (19.4%)	5 (16.1%)

When the respondent’s opinions were sought on their view of what was the general position of facilities for the outdoor activities in their public pre-primary schools, 35.5% (11) of them said the psychomotor facilities were very inadequate while 19.4% (6) held a

general opinion that the psychomotor apparatus in their centers were generally adequate. As a whole, the result of the study revealed that a majority 19 (61.3%), of the public pre-primary schools' teachers held a common opinion that the conditions of the outdoor play apparatus were generally fair but not adequate for the effective implementation of the psychomotor activities in the public pre-primary school curriculum within Vihiga County. On the same note, one parent had this to say, *“I cannot meet the provision of play facilities, materials and equipment because i do not value play activities (PFGD, I).”* An inadequate provision of play facilities, materials and equipment is a factor that results to limited involvement of the learners in the psychomotor activities. The findings are contrary to the opinion held by Abbott and Nutbrown (2001) that the school environment is important for the learners to play activities to improve and prosper.

4.4.4 Head teachers' perception on influence of physical resources on psychomotor activities

The Head teacher's response was considered appropriate because they were able to provide some of the physical resources needed in the learners' implementation of the psychomotor activities in the public pre-primary schools. Their response is represented in Table 4.18.

Table 4.18: Head teachers’ response on influence of physical resources on learners’ psychomotor activities

Item	SA	A	U	D	SD
Play facilities are adequate	6 (19.4%)	12 (38.8%)	2 (6.5%)	8 (25.8%)	3 (9.7%)
Play equipment is adequate	2 (6.5%)	7 (22.6%)	0 (0.0%)	12 (38.7%)	10 (32.3%)
Psychomotor activity is timetabled and implemented	3 (9.7%)	5 (16.1%)	3 (9.7%)	14 (45.2%)	6 (19.4%)

Source: Survey Data (2016)

It is deduced from the findings that the majority of head teachers 12 (38.8%) agree that play facilities are adequate. This implies that teachers can implement the pre-primary psychomotor curriculum activities in Vihiga County. The researcher observed that some public pre-primary schools had adequate play fields for the implementation of learners' psychomotor activities in the curriculum. However, most public pre-primary schools had none of their play fields. The fields were shared among public pre-primary, primary, and secondary schools that cannot effectively allow efficient learners' implementation of the psychomotor activities in the public pre-primary schools. Therefore, lack of adequate play fields limits implementation of learner’s psychomotor activities in the public pre-primary school curriculum.

The finding further show that majority of the head teachers disagree that play equipment is adequate. This was indicated by 12 (38.7%) head teachers' responses. The survey established limited play fields for implementation of learners’ psychomotor activities in the public pre-primary school curriculum. The study further revealed that most public pre-primary school did not have their own play fields. This implies that though a play

field may be available, inadequate provision of psychomotor equipment adversely negates its implementation. The researcher observed that simple play equipment such as ropes, balls, seesaw, and swings was not available. Another ECDE supervisor from SFGD 2 reported that most public pre-primary schools could not afford the cost of purchasing the physical resources needed for implementation of the psychomotor activities in the curriculum.

It can further be deduced from the results that though the policy stipulates that the psychomotor activities should be timetabled; its implementation remains a critical issue. This was indicated by the head teacher's response of 14 (45.2%) who vehemently disagree that psychomotor activities are timetabled and implemented. It was further observed that in some schools, children were left on their own having free play of their own without their teacher's instructions. Most parents reported that they do not provide home tutoring timetables for their children because of lack of awareness in pre-primary school syllabus contents and their illiteracy level. One of the ECDE supervisors retorted,

"Most teachers follow the class timetable and take learners out to participate in outdoor activities when we visit schools to oversee curriculum implementation, SFGD 1."

Testing for the hypothesis

The study also tested for the following null hypothesis

H₀₂: There is no significant difference between the physical resources and learners' implementation of the psychomotor activities in the public pre-primary school curriculum.

The hypothesis was tested in view to ascertaining the relationship between the physical resources and learners' implementation of the psychomotor activities in the public pre-primary school curriculum. The results is presented in Table 4.19 below.

Table 4.19: ANOVA analysis on physical resources and learners' implementation of psychomotor activities

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	8988.300	6	1498.05280	2.840	.000
Within Groups	4674.690	25	186.9876		
Total	13662.991	33			

Source: Survey Data (2016)

The results showed that $\{F(6, 25) = 2.840, p = .000\}$. Thus, the p-value was 0.000 that was less than the acceptable 0.05 significance level. Therefore, the null hypothesis was rejected and the alternative hypothesis accepted that there is a significant difference between teacher factors and learners' implementation of the psychomotor activities in the curriculum. This implies that physical resources influence learners' implementation of the psychomotor activities in the public pre-primary school curriculum.

4.5 Influence of parental participation on implementation of learners' psychomotor activities

The third objective of the study was to examine the influence of parental participation on implementation of learners' psychomotor activities in the public pre-primary school curriculum in Vihiga County. This is in tandem with some of the global studies that recognize the pivotal role of psychomotor activities not only on the learners' health and

growth but also in the diverse roles of psychomotor activities on children learning outcomes (Heather, Melinda, Ahn & Fedewa, 2014; Park & Riley, 2015). The objective of this study was achieved through quantitative analysis from the teachers' questionnaire and the qualitative analysis from the parents and ECDE focus group discussion. The public pre-primary school teachers' questionnaire was based on the five-point Likert scale that had a statement that ranged from strongly disagree=1 (SD), disagree=2 (D), neutral=3 (N), agree=4 (A), and strongly agree=5 (SA). This is summarized in Table 4.20.

Table 4.20: Teachers' response on parents' participation and implementation of learners' psychomotor curriculum activities.

Item	SD	D	N	A	SA
Parents cooperate with the teachers concerning the implementation of learner's psychomotor activities in the curriculum at home	14 (45.2%)	6 (19.3%)	5(16.1%)	4 (12.9%)	2 (6.5%)
Parents provide schools and at home with psychomotor activity resources	10 (32.2%)	9 (29.1%)	1 (3.2%)	7(22.6%)	4 (12.9%)
Parents have high expectations about their support for children's psychomotor activities	5 (16.1%)	12(38.7%)	3 (9.7%)	8(25.8%)	3 (9.7%)
Parents are involved in attending class consultative meetings	6 (19.3%)	5 (16.1%)	2 (6.5%)	11(35.5%)	7 (22.6%)
Parents provide a safe environment at home for the children's psychomotor activities in the curriculum	12(38.8%)	5 (16.1%)	5(16.1%)	4 (12.9%)	5(16.1 %)
Parents provide guiding and counseling to their children on inculcating a positive attitude toward the psychomotor activities	7 (22.6%)	10 (32.2 %)	6(19.3%)	5 (16.1%)	3 (9.8%)
Parents make contact with schools on children's follow-up activities about home psychomotor activities	5 (16.1%)	15 (48.4%)	2 (6.5%)	4 (12.9%)	5(16.1 %)

The finding of the study indicates that most teachers 14 (45.2%) had a contrary view that parents do not cooperate with public pre-primary school teachers at ensuring learners' implementation of the psychomotor activities in the curriculum. The study could not reveal any consultative meeting between parents and teachers on implementation of learners' psychomotor activities in the public pre-primary school curriculum. The findings were echoed by most of the ECDE supervisors who agreed that most parents could not actively be involved in the learners' implementation of the psychomotor activities in the curriculum due to the lack of awareness of the link between the parents and the teachers. Most parents also reiterated that they do not know how they should cooperate with the teachers concerning the implementation of the learners' psychomotor activities in the public pre-primary school curriculum. This implies that there is a lack of a cordial relationship between the parents and the teachers in the implementation of the learners' psychomotor activities in the pre-primary school curriculum. The finding is in line with Taneri (2012) who established that parents who dismiss the implementation of the learners' psychomotor activities do not relate well with the teachers at school. Still, Sabanci (2009) (2009) supports this finding by noting that students' educational environment is greatly influenced by the interaction between parents and teachers. A study by Mwamwenda (2014) further concurs that parents most parents are more concerned with the academic achievement of their children than the psychomotor attributes.

It can be concluded from the finding that a majority of the parents are unable to provide the psychomotor materials and equipment for the implementation of the learners' psychomotor activities. A parent supported the findings saying, *"Most of us are single*

mothers who do not have the financial ability to provide the equipment and materials needed by the public pre-primary schools (PFGD, 2).” Similarly, another ECDE supervisor from SFGD 1, reiterated the lack of Free Primary Education financial support for the public pre-primary school learners as a barrier to the adequacy of materials and equipment for the learners when compared to the learners in the public primary schools. Further analysis established that parental support for the provision of teaching and learning materials and equipment was limited. Parents should be encouraged to actively be involved in providing supplementary equipment and learning materials for their children to realize the smooth implementation of the psychomotor activities in the pre-primary school curriculum. The finding concurs with Bodrova and Leong (2015) who stated that most children interact with play materials that are not suitable for enhancing imaginations and holistic development. Likewise, Andiema (2020) also agrees that the pre-primary school children were not actively engaged in psychomotor and creative activities because of inadequate availability such opportunities that include; plays, singing, painting, drawing sculpturing and singing, and dramatization.

The finding established that most teachers 12 (38.7%) had the contrary belief that parents have high about their support for the children's psychomotor activities in the public pre-primary school curriculum. This notion was supported by one of ECDE supervisors in the SFGD 2 that,

"Parents have high regard to their children's academic performance rather than the psychomotor skills because of the competition brought about the hopefully expected high marks and grades, SFGD 2."

A similar finding was supported by parents who feared the risks that arise from the psychomotor activities. The study did not, however, reveal any support that parents the children's psychomotor activities. This implies that parents consider the academic drills with the belief that high academic scores guarantee opportunities for higher education progression and carrier choice. This was in line with Wilson (2000) who asserts that most parents fear for their children's safety, attacks by diseases, and pollution that hampers children's engagement in outdoor psychomotor activities. Further, Gandhi (2000) asserts that many parents enroll their children in pre-primary schools with the notion that their academic drills prepare them for their future career choice and progression.

The finding established that that most teachers 11 (35.5%) agreed that parents usually attend the class consultative meetings concerning their children's participation in the implementation of the psychomotor activities in pre-primary schools. The parents also reported that they attend the consultative class meetings but the emphasis on financial support for the implementation of the psychomotor activities is a challenge to them. It was also established that most parents attend class consultative meetings but do not act on the deliberations agreed upon, especially on the material and equipment support. This might be attributed to the financial constraints that are a necessity for smooth implementation of the psychomotor activities as required by the current competency-based curriculum. However, it was established that parents and teachers consultative meetings focused on academic-oriented financial support and the pre-primary school feeding programme at the expense of implementation of learners' psychomotor activities. The finding was supported by Fuligni (2009) whose study revealed a strong school achievement of the many first- and second-generation youngsters from imminent

backgrounds – not only Asian but also Filipino and Mexicans—reflects their families and friends' strong emphasis on and support of educational success. A study by Kipkemoi (2012) is also congruent with the findings that parents play a minimal role in ensuring children's acquisition of the social skills that are also pertinent to the holistic development of the child.

On the flip flop, a majority of the teachers 12 (38.8%) provided a strongly contrary response that parents provide a safe environment at home for the implementation of the learner's psychomotor activities in the public pre-primary school curriculum. One of the parents also stated,

"I do not have adequate compound, equipment, and materials for my child's engagement in the psychomotor activities. This is because of my low socio-economic status. I am a single mother who cannot support my child's educational needs. How i wish the government could support us with the free pre-primary school education just as we have free primary education as well as free day secondary school, PFGD 1."

Another ECDE supervisor in the SFGD 1 noted, *"Most parents are overburden with the demands of the newly introduced competency-based curriculum that cannot be realized without the parents' involvement at home."* This implies that most of the parents are unable to participate in the implementation of the learners' psychomotor activities in the public pre-primary schools' curriculum because they come from low-income families who cannot afford provision of play materials and equipment. The study finding concurs with that of Phu (2019) who averred that psychomotor activities are not inherent characteristics because, through an appropriate environment, children can be nurtured and developed. Akoth (2016) supports this finding by noting that parental provision from private pre-primary schools with a safe learning environment, and adequate materials and

equipment and materials is a threshold to enhance the implementation of the learners' psychomotor activities in the public pre-primary school curriculum.

Further, most teachers 10 (32.2%) disagree that parents provide guidance and counseling and encourage their children to have a positive attitude towards the implementation of the learners' psychomotor activities in the public pre-primary school curriculum. The study established that the available records did not have evidence on how parents participated in providing guidance and counseling and encouraging their children to have a positive attitude towards the implementation of the learners' psychomotor activities in the public pre-primary school curriculum. One of the parents stated,

"The age of my child cannot allow him to make a decision and/or conclusion of what type of career he wants to take in future though some have role models here or elsewhere, PFGD, 2."

Likewise, another ECDE supervisor noted,

"Parents emphasize on the academic achievement of their children despite the new competency-based curriculum. Some try to negate this view, SFGD, 1."

Thus, most parents prefer to provide guiding and counseling and encouraging the children to have a positive attitude towards the implementation of the learners' psychomotor activities in the public pre-primary school curriculum. The intervention of the early years of children in their psychomotor activities is considered as an encouragement to promote their different future career choice rather than depending on academic drills that lack hands-on activities. This finding was echoed by Mabagala and Libent (2019) whose study revealed that teachers and daycare providers are constantly reluctant in providing psychomotor skills to pre-primary school children as a result of

pressure from their parents. The finding was in agreement with Musila (2015) who noted that the psychomotor skill development of the children was dependent on parental participation through guiding and counseling in the education of the pre-primary school learners.

The study established that teachers 15 (48.4%) disagree that parents made contact with the public pre-primary schools about children's follow-up activities in the implementation of the psychomotor activities at home. The study did not ascertain any documents to support parents' participation in the implementation of learners' psychomotor activities in the entire public pre-primary school curriculum. One of the parents corroborated the view and had this to say,

"We usually make contacts with the teachers on our children's academic performance because this is our focus. However, the psychomotor activities are a waste of our children's academic time and also poses a health risk when they get injuries, PFGD 2."

The ECDE supervisors who stated most teachers lack adequate time to have mutual contact about psychomotor activities noted a similar view. They mainly concentrate on the completely academic pre-primary school curriculum areas instead of the psychomotor activities that consume a lot of time during teaching and learning. Most of the public pre-primary school teachers are elderly with minimal interest in psychomotor activities. The finding reflects how the public pre-primary school teachers and parents negate the tenets of the children learning through psychomotor activities that enhance the effective holistic development of the learners. The finding of the study corresponds to Jayatilaka (2010), who averred that parents lack adequate skills and knowledge about providing a suitable home environment, for the learners' follow-up on the children's interaction about creative

skills and abilities. The findings are in tandem with Bakken, Brown and Downing (2017) who noted that parental participation in school education is directly associated with the holistic development of the children.

The study sought to establish the following null hypothesis:

H₀₃: There is no significant difference between parents’ participation and implementation of learners’ psychomotor activities in the public pre-primary school curriculum. The inferential statistics ANOVA was adopted to indicate the relationship between parents’ participation and implementation of learners’ psychomotor activities. The finding is indicated in Table 4.21.

Table 4.21: ANOVA analysis on parental participation and learners’ implementation of psychomotor activities

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	9324.024	6	1554.004	8.661	.004
Within Groups	6338.967	25	253.558		
Total	15662.991	31			

Source; Survey Data (2016)

The results showed that {F (6, 25) = 8.661, p = .004}. Thus, the p-value is 0.004 that is less than the significant level 0.05. The study, therefore, rejected the null hypothesis and alternative hypothesis that there was a significant difference between parents’ participation and implementation of the learners’ psychomotor activities in the public

pre-primary school curriculum. This implies that parents' participation influences learners' psychomotor activities in the public pre-primary school curriculum.

4.6 Influence of policy factors on implementation of learners' psychomotor activities

The last objective of the study was to investigate on policy factors that influence on implementation of learners' psychomotor activities in the public pre-primary schools' curriculum. This objective was addressed by the use of a questionnaire that was administered to both public pre-primary schoolteachers. It is believed that several governments and school policies do influence learners' implementation of psychomotor activities in the pre-primary school curriculum. Hence, Likert scaled items were related to the constructs of government and school policies that were deemed appropriate to influence learners' implementation of the psychomotor activities in the pre-primary school curriculum.

4.6.1 Teachers' views on influence of policy factors and implementation of learners' psychomotor activities

The teachers provided their views on the policy factors on pre-primary school education, based on their experience and knowledge. The implementation of the policy factors is vital because it needs mutual collaborative input from all stakeholders including the federal and state government, school administrative structures, parents, community, and guardians (Ibhaze, 2016). The response was based on a 5-point Likert scale and scored in order of VLI - very low influence (1), LI - low influence (2), MI - moderation influence (3), HI - high influence (4) and VHI - very high influence (5). These were summarized in Table 4.22.

Table 4.22: Teachers' views on influence of policy factors on implementation of learners' psychomotor activities

Government Policy Factor	VLI	LI	MI	HI	VHI
County Government funding improves the implementation of psychomotor play activities in the ECDE curriculum.	2 (6.5%)	5 (16.1%)	7 (22.5%)	8 (25.8%)	9 (29.0%)
Paying of levies by parents facilitates the timely sourcing of teaching /learning materials, which enhances participation in outdoor psychomotor activities in the ECDE curriculum.	5 (16.1%)	7 (22.6%)	3 (9.7%)	9 (29.0%)	7 (22.6%)
Employment of ECDE teachers and assistant teachers by the County government promotes participation in psychomotor play activities in the ECDE curriculum	5 (16.1%)	6 (19.4%)	2 (6.5%)	11 (35.5%)	7 (22.6%)
The insistence of the government on the minimum land acreage size enhances the implementation of outdoor play activities in the ECDE curriculum	3 (9.7%)	6 (19.4%)	3 (9.7%)	4 (12.9%)	15 (48.4%)
Government insistence that all ECD centers must provide safe drinking water, as well as play and learning equipment, enhances involvement in psychomotor activities.	3 (9.7%)	5 (16.1%)	13 (41.9%)	4 (12.9%)	6 (19.4%)
Learning in ECD centers should be activity based and should be through play and the language of the catchment area (mother tongue) to be used in communication and instruction.	0 (0.0%)	7 (22.6%)	4 (12.9%)	8 (25.8%)	12 (38.7%)
ECD centers are required to provide children with a snack during break time and a balanced diet lunch.	5 (16.1%)	3 (9.7%)	13 (41.9%)	4 (12.9%)	6 (19.4%)
All ECDE teachers should be professionally trained, and qualified to handle the learners.	0 (0.0%)	1 (3.2%)	5 (16.1%)	9 (29.0%)	16 (51.6%)

The findings of the study show that the public pre-primary school teachers had a perception that government and school policies have considerable influence on public

pre-primary school education, especially as regards the implementation of psychomotor activities in the curriculum. For example, an overwhelming majority of the public pre-primary school teachers who took part in the study were convinced that learning in public pre-primary schools should be activity based and should be through play as laid down by the government and school policy. This point of view was supported by (12) 38.7% of respondents who believed that this policy has a high influence on the implementation of the learners' psychomotor activities in the pre-primary school curriculum. At the same time, they held a conviction that the language of the catchment area (mother tongue) should be used in communication and instruction in the pre-primary school as stipulated by the ECDE education policy (KIE, 2006). A further probe with parents confirmed that they are not informed of any policy that concerns implementation of the learners' psychomotor activities in the pre-primary school curriculum. This finding is consistent with Christie and Roskos (2013) who stated that literacy skills could be obtained by using play materials that are appropriate to literacy behavior such as reading and writing skills.

It was noted from the survey that more than half of 54.8% (17) of the teachers who participated in the study held a strong perception that the county government funding to the pre-primary schools improves the learners' implementation of the psychomotor activities in the public pre-primary school curriculum. However, about a fifth 22.5% (7) of them thought that the influence of county government funding on public pre-primary schools does not make a direct impact on the learners' implementation of psychomotor activities in the public pre-primary school curriculum. 51.6% (16) of the respondents held a general belief that paying of levies by parents facilitates timely sourcing of teaching and learning materials, which enhances participation in outdoor play activities in the pre-

primary schools' curriculum. They believed that levies that are paid by parents regularly had a greater influence on curriculum implementation than the funding from the county government, which they argued still lacked timeliness and consistency. A further probe by the study revealed that most parents only pay attention to funding academic oriented activity areas but not the implementation of the learners' psychomotor activities in the curriculum. They held the view that the public pre-primary school learners ought to be funded in tandem with those of the public primary school's Free Primary Education (FPE). This conforms to Fromberg (2002) who argues that children's development of gross motor skills and social interaction are key to early exposure to playing materials.

However, it was established that the employment of the public pre-primary school teachers by the County government promotes participation in learners' psychomotor activities in the pre-primary schools' curriculum. This was indicated by 58.1% (18) of the teachers who took part in the study who held a belief that the employment of public pre-primary school teachers by the county governments has a significant influence on the learners' implementation of psychomotor activities in the public pre-primary school curriculum. In addition, it emerged from the findings of the study that as a matter of policy, all public pre-primary school teachers should be professionally trained and qualified to handle pre-primary learners. More than four out of every five [80.6% (25)] of the teachers who were sampled for the study held a conviction that professionally trained and qualified pre-primary school teaching staff has a great positive influence on the implementation of learners' psychomotor activities in the public pre-primary schools' curriculum.

Moreover, it was established that most of the unemployed teachers by the Vihiga County Government were paid their monthly wages by the public pre-primary school parents that was not consistent and at times not forthcoming. One of the parents had this to say, *“My child is always at home because I cannot afford to for the teachers monthly wages. I am unemployed to fund my child’s education, PFGD 2.”* A further conversation with the ECDE supervisors affirmed that most parents are unable to fund their children’s education especially paying for the teacher’s monthly payment. This finding concurs with that of Papalia, Gross & Feldman (2003) who observed that children learn by observing and imitating models and their model in the psychomotor activities is the qualified and professionally trained teacher.

It was observed that the government's insistence on minimum land size for the construction of the public pre-primary schools an appropriate environment for psychomotor activities. As a policy, the government insists on a minimum land acreage size for the development of pre-primary schools to create enough room for the learners' play. This point of view was held by 48.4% (15) of the teachers who took part in the study who asserted that this policy enhances the implementation of the learners' psychomotor activities in the public pre-primary school curriculum. However, most ECDE supervisors stated that public pre-primary school would continue to exist in the public primary schools because the government does not have extra land to construct new schools. According to Koech (2010) and the Republic of Kenya (2006) reports the minimal acreage for ECDE centers should be 0.125 acres of land for urban areas and 0.25 acres of land for rural areas to allow learners space for free psychomotor play.

On the same note, it was discovered that government insists that all public pre-primary schools must provide safe drinking water as well as play and learning equipment to their learners. However, it emerged that only 19.4% (6) of the surveyed public pre-primary schools' teachers believed the availability of safe drinking water influenced the learners' implementation of psychomotor activities in the public pre-primary school curriculum, while on the contrary, 41.9% (13) of them said that although there was the influence of this policy on pre-primary schools' curriculum, it was only moderate. The study observed that most schools did not have tap water except for storage water, which was only available during the rainy season. It, therefore, implies that learners had to look for alternative means of finding water for drinking, washing utensils, and cleaning. One supervisor who retorted echoed this sentiment,

“Most public pre-primary schools do not have tap water but they normally come along with it in containers like recycled mineral water bottles from their homes, SFGD 2.”

The findings are contrary to the opinion held by Dymont (2005) who noted that a school environment that has varied determinants for play activities builds learners' social interactions, mental or cognitive development, and physical development.

Similarly, on the same proportion, the public pre-primary school teachers who took part in the study held that although it is required as a matter of policy that pre-primary schools provide children with a snack during break time, this was not forthcoming. The provision of school snacks enhanced learner's balanced diet and sustenance during the learning process and have an influence on implementation of the learners' psychomotor activities in the public pre-primary school curriculum. One supervisor who was interviewed said:

“Pupils usually take porridge at school that is provided by parents during break time, SFGD, 1.”

These findings confirm the pre-primary schools’ policy framework (GOK, 2006), in Kenya that for effective quality of education to be realized for the preschool learners, adequate allocation of resources that include adequate land, trained and qualified teachers, provision of instructional materials, physical facilities, and school finances should be provided.

4.6.2 Head teachers’ views on influence of policy factors and learners’ implementation of psychomotor activities

The head teachers provided their views on the policy factors influencing the implementation of the learners' psychomotor activities in the public pre-primary schools’ curriculum. This was based on a 5-point Likert scale and scored as; VLI - very low influence (1), LI - low influence (2), MI - moderation influence (3), HI - high influence (4) and VHI - high influence (5). This is shown in Table 4.22.

Table 4.22: Head teachers' views on policy factors influencing implementation of learners' psychomotor activities

Government Policy Factor	VLI	LI	MI	HI	VHI
County Government funding improves the implementation of psychomotor activities in the ECDE curriculum.	3 (9.7%)	5 (16.1%)	4 (12.9%)	9 (29.0%)	10 (32.3%)
Paying of levies by parents facilitates timely sourcing of teaching /learning materials that enhances participation in psychomotor activities in the ECDE curriculum.	9 (29.0%)	8 (25.8%)	2 (6.4%)	6 (19.4%)	6 (19.4%)
Employment of ECDE teachers and assistant teachers by the County government promotes participation in psychomotor activities in the ECDE curriculum.	0 (0.0%)	0 (0.0%)	5 (16.1%)	10 (32.3%)	16 (51.6%)
The insistence by the government on the minimum land acreage size enhances the implementation of outdoor play activities in the ECDE curriculum	2 (6.4%)	5 (16.1%)	3 (9.7%)	8 (25.8%)	13 (41.9%)
Government insistence that all ECD centers must provide safe drinking water, as well as play and learning equipment, enhances involvement in psychomotor activities.	5 (16.1%)	6 (19.4%)	3 (9.7%)	8 (25.8%)	9 (29.0%)
Learning in ECD centers should be activity based and should be through play and the language of the catchment area (mother tongue) to be used in communication and instruction.	0 (0.0%)	3 (9.7%)	4 (12.9%)	10 (32.3%)	14 (45.2%)
ECDE centers are required to provide children with a snack during break time and a balanced diet lunch.	5 (16.1%)	4 (12.9%)	6 (19.4%)	7 (22.6%)	9 (29.0%)
All ECDE teachers should be professionally trained and qualified to handle the learners.	0 (0.0%)	4 (12.9%)	4 (12.9%)	10 (32.3%)	13 (41.9%)

Source: Survey data (2016)

The findings of the study show that, unlike the pre-primary schoolteachers, head teachers were highly convinced that the policy factors have a significant influence on the implementation of the learners' psychomotor activities in the public pre-primary school curriculum. For instance, almost a third (9) of the head teachers who took part in the study held a very strong belief that all public pre-primary school teachers should be professionally trained and qualified to handle the learners, as in the policy of ECDE education. They argue that this policy has a great influence on the effective implementation of the learners in the public pre-primary school curriculum, which includes but is not limited to psychomotor activities. A further finding indicated that most of the pre-primary school teachers were trained that was strength on the implementation of learners' psychomotor activities in the public pre-primary school curriculum. Moreover, most of the public pre-primary school teachers had the desired educational and professional qualifications and registered by the Teachers Service Commission (TSC) as stipulated by the TSC Act (2020) to facilitate the implementation of learners' psychomotor activities. The findings concur with a study by Bosah, Ejesi and Aleke (2016) that the central and federal governments should organize teacher in-service courses, have effective supervisory procedures, fund, and allow the federal government to establish preschools.

The study established that 29.0% [9] of head teachers agreed that paying of levies by the parents facilitates the timely sourcing of teaching and learning materials, which enhances learners' participation in psychomotor activities in the ECDE curriculum. Financial levies also enable payment of the ECDE teachers' salaries who are not employed by the Vihiga County government. The researcher noted that the county government had employed a

maximum of two teachers in every public pre-primary school and the parents paid any additional teachers emanating from the high pupil enrollment. Further scrutiny of the documents revealed the inability of most parents to pay the school levies for their children. This is likely to compromise the quality of education in public pre-primary schools given that education has been declared free, compulsory and 100% transition rate to the public primary schools. This finding was supported by Nirmala, Lau and Li (2011) whose conclusion was that parents' participation in preschool education was higher at home and less at school.

A significant majority of the head teachers 32.3% (16) supported the employment of public pre-primary school teachers by the County government, which they strongly believed promotes participation in the learners' psychomotor activities in the ECDE curriculum. Another proportion of the pre-primary school teachers 32.3% (10) indicated that the policy of employment of the public pre-primary school teachers highly influences the implementation of outdoor play activities in the ECDE curriculum. However, it was observed that most of the public pre-primary schools had inadequate teacher staffing and lacked sufficient financial ability to employ more teachers because of high enrollment. A further one-to-one conversation with one of the ECDE supervisors retorted, *"The requirement that all teachers in public schools should be registered by the Teachers Service Commission has caused understaffing in public pre-primary schools. This has results in overcrowding and teachers inability to implement learners' psychomotor activities in public pre-primary school curriculum, SFGD 1."* This implies that most of the public pre-primary school learners' implementation of the psychomotor activity curriculum was below the expected threshold. The findings are consistence with

Nannyonjo (2007) whose study on determinants that influence learning performance in Uganda established that teachers' characteristics that result in learners' outcomes include; teachers' qualifications, teachers' in-service courses, chronological age, teaching strategies, teachers' qualifications and experience, school evaluation strategies, and school administrative effectiveness. Ajayi (2008) further claims that institutions that have employed teachers with unqualified and unprofessional qualifications cannot provide effective teaching and learning.

The finding of the study resonates with the generally held belief that ECDE learning should be learner-centered and activity oriented. It emerged that an overwhelming majority of 14 (45.2%) of the head teachers who were sampled for the study agreed with a policy on ECD education that learning in pre-primary schools should be activity-based (KIE, 2008) and should be through play and that the language of the catchment area (mother tongue) should be used in communication and instruction. The head teachers argued that this when done as expected, had a significant positive influence on the effectiveness of the implementation of the ECDE curriculum to the latter. It was also revealed that most of the public pre-primary schools had ECDE policy guidelines indicating how to utilize teaching and learning materials in the learning process. Therefore, any deviation from the ECDE policy was a lack of teachers' preparation, attitude, and commitment that affect the learners' implementation of the psychomotor activities in the pre-primary curriculum. However, the study revealed that there were not any policy guidelines on how parents are involved in the curriculum implementation of the pre-primary school psychomotor activities. This was confirmed by White (2012) who noted that play activities among learners are associated with increased learners' active

participation during lesson presentation and social-emotional learning, school commitment, and high academic performance.

It was confirmed that the government insisted that all the public pre-primary schools should be built on a compound not less than 0.125 acres for urban areas, and 0.25 acres for Rural (KIE, 2008). Urban slums could be less than 0.125 acres provided they met basic conditions of sanitation and health high density and 0.5 acres for rural low density provide safe drinking water, as well as play and learning equipment, enhances involvement in outdoor activities, as was indicated by 13 (41.9%) of the head teachers who participated in the study. However, it was observed that most pre-primary and public primary schools land acreage was not spacious enough for the implementation of learners' psychomotor activities in the curriculum. The researcher observed that none of the pre-primary schools had their own field and the available land was for the primary school that was further shared by the secondary schools. The findings are in line with the findings of Bosah, Ejesi and Aleke (2016) that the central government and the federal government should ensure the provision of adequate teaching and learning materials and facilities, organize teacher in-service courses, and fund pre-primary schools.

On the same note, 5 (16.1%) of the head teachers alluded that if the public pre-primary schools provide children with a snack during break time and a balanced diet lunch, as required by ECDE policy, the learners would participate well in psychomotor activities. However, it was observed that not all the schools were involved in the provision of snacks, which hindered learners' concentration in both indoor and outdoor games. There was evidence of parental support in the provision of snacks in the pre-primary schools to boost learners' school feeding program. The provision of food supplements in preschools

enables learners to actively participate in play activities and concentrate during the classroom teaching and learning process. This is consistent with studies done by Heather, Melinda, Ahn and Fedewa (2014) and Park and Riley (2015) who argue that play is not only recognized for its importance in children's health and growth but also its multiple roles in children's learning outcomes.

On the other hand, paying of levies by parents was rejected by 9 (29.0%) of head teachers who negated the claim that it facilitates timely sourcing of teaching and learning materials and facilities which enhances learner's participation in psychomotor activities in the public pre-primary school curriculum. The study revealed that the Ministry of Education and the County government of Vihiga do not provide teaching and learning materials and equipment although the primary school learners benefit from the government Free Primary Education (FPE) programs. The study revealed minimal parents financial assistance to schools regarding implementation of the learners' psychomotor activities in the public pre-primary school curriculum. Thus, the inadequate teaching and learning materials affect the consistent implementation of the learners' psychomotor activities in the public pre-primary school curriculum. This confirms Oyewumi (2010) who further claim that only a few wealthy institutions and parents have employed competent and committed qualified university graduates that correspond to learners' quality education but most public institutions have teachers with low qualifications coupled with minimal payments and remunerations.

On the contrary, 10 (32.3%) of the head teachers held a strong belief that the County Government funding significantly improves the implementation of psychomotor activities in the ECDE curriculum. Most parents argued that there exist imbalance between the type

of education provided in privately owned schools and public pre-primary schools because of the socio-economic status and family income. The funding from state organs ensures the provision of play materials and facilities for children's active participation. The study further observed that in most schools, the limited play equipment and materials was improvised by the teachers, and provided by the parents implying, that little funding come from the County government. The finding was in tandem with the recommendations given by Ibhaze (2006) that, the Nigerian federal and central governments should strengthen pre-school institutions through provision of teaching and learning resources in both private and public institutions to reduce the high teacher: pupil ratio.

The results of the survey indicate that most head teachers who were involved in the study supported the policy of the government on the minimum land size required for the construction and development of the ECDE center. More than 67.7% (21) of them were of the general opinion that insistence by the government on the minimum land acreage size highly enhances the implementation of psychomotor play activities in the ECDE curriculum. Only 22.5% (7) of them held a contrary opinion, they insisted that land acreage has minimal influence on the implementation of psychomotor activities in the ECDE curriculum. The provision of adequate space or land for learners' play activities motivates them to participate in psychomotor activities to break the indoor monotony activities. Glasgow and Whitney (2009) note that children should be given opportunities to relax, and enjoy pleasurable activities because classroom subjects are sometimes too demanding that requires children's' rejuvenation.

The finding of the study indicated that most of the head teachers 13 (41.9%) had very high regard that all the pre-primary school teachers should be professionally trained and qualified to handle the learners. The study revealed that most teachers were adequately trained, and qualified to handle the implementation of the learners' psychomotor activities in the public pre-primary school curriculum. The finding further revealed that most public pre-primary school teachers consistently prepared their schemes of work, lesson preparations, attendance registers, and continuous assessment records for the smooth implementation of the learners' psychomotor activities in the curriculum. However, the finding revealed limited implementation of the learners' psychomotor activities in the public pre-primary school curriculum due to the inadequate time, high teacher workload, and high teachers' age, emphasis on the academic drills, and insufficient equipment and materials. This finding was similar to that of Nannyonjo (2007) who established that the teachers' characteristics that result in the learners' educational outcomes include chronological age, in-service training courses, teacher's qualification, and experience, teacher's evaluation, and teaching strategies, and school administrative effectiveness. Nevertheless, Ng'asike (2004) established that teachers' professional training enhanced child-centered lessons, effective pedagogical strategies, and high scores in the examinations among the learners.

Testing for the hypothesis

The following hypothesis was therefore tested:

H₀₄: There is no significant difference between the Policy factors and the implementation of learners' psychomotor activities in the public pre-primary schools' curriculum.

The inferential statistics, One Way Analysis of Variance (ANOVA) test was used to establish the strength of the relationship between the policy factors and the implementation of the learners' psychomotor activities in the public pre-primary school curriculum. This is indicated in Table 4.23.

Table 4.23: ANOVA analysis on policy factors and learners' implementation of psychomotor activities

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	10222.484	6	1703.747	9.983	.000
Within Groups	3440.507	25	137.620		
Total	13662.991	31			

Source; Survey data (2016)

The results showed that $\{F(6, 25) = 9.983, p = .000\}$. The p-value 0.000 was less than the acceptable p – value 0.05 significant level hence, the null hypothesis was rejected. Therefore, the alternative hypothesis was accepted that there is a significant difference between the policy factors and the implementation of learners' psychomotor activities in the public pre-primary schools' curriculum. This implies that policy factors influence the implementation of the learners' psychomotor activities in the pre-primary school curriculum. The study affirms a study by Bosah, Ejesi & Aleke (2016) who concluded that in Nigeria there is a positive significant relationship between the government policy on primary education and learner's future performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings that highlights the teacher factors, adequacy of the physical resources, parental participation, and policy factors that influence the implementation of the learners' psychomotor activities in the public pre-primary school curriculum. It further presents conclusions of the findings, general recommendations, and finally, recommendations are made for further research.

5.2 Summary of Findings

The summary of the study findings presented as follows:

- i. To find out the influence of the teacher factors on implementation of learners' psychomotor activities in the public pre-primary schools' curriculum in Vihiga County.
- ii. To examine the influence of physical resources on implementation of learners' psychomotor activities in the public pre-primary schools' curriculum in Vihiga County.
- iii. To examine the influence of parental participation on implementation of learners' psychomotor activities in the public pre-primary schools' curriculum in Vihiga County.
- iv. To determine influence of policy factors on implementation of learners' psychomotor activities in the public pre-primary schools' curriculum in Vihiga County.

5.2.1 Influence of teacher factors and implementation of learners' psychomotor activities

The study investigated influence of teacher factors on implementation of psychomotor activities in the public pre-primary school curriculum in Vihiga County. Concerning teacher factors, it was established that pre-primary schoolteachers concentrated more on teaching academically oriented activity areas at the expense of psychomotor activities. It also established that pre-primary schoolteachers developed a negative attitude towards the learners' psychomotor activities as it was regarded as tiresome and physically involving a lot of energy. The results indicated that most pre-primary concentrated more on the academically oriented activities rather than the learners' psychomotor activities as demanded by stakeholders to attract and retain more children in the ECDE Centers. It was further established that some teachers used play as punishment for wrongdoing and therefore made the play look punitive and arduous activity. Nonetheless, it was revealed that the teacher factors such as training, motivation, and remuneration influenced the implementation of the learners' psychomotor activities in the public pre-primary school curriculum.

The findings also showed that the teachers' factors influence participation influence the implementation of the learners' psychomotor activities in the pre-primary school curriculum in Vihiga County. The results showed a significant difference between teacher factors and the implementation of the learners' psychomotor activities in the curriculum $\{F(6, 25) = 2.552, p = .000\}$. Therefore, the null hypothesis was rejected and the alternative hypothesis accepted that there is a significant difference between teacher

factors and the implementation of learner's psychomotor activities in the public pre-primary school curriculum.

5.2.2 Influence of physical resources and implementation of learners' psychomotor activities

The study established that teachers rarely accompanied their learners for psychomotor activities in the fields daily. The study established that there is a lack of adequate equipment and materials for the implementation of learners' psychomotor activities in the public pre-primary school curriculum.

The physical resources such as; swimming pools, merry-go-rounds, climbing frames, slides, Wendy houses, tire tunnels, and swings that are important for the implementation of the psychomotor activities in the pre-primary school's curriculum are inadequate. It was established that most public pre-primary schools lacked their play grounds. The playgrounds had limited movable and poorly maintained equipment. The study also established that First Aid Kits were inadequate in the public pre-primary schools though not fully equipped for risk preparedness, as there were health centers within proximity for emergencies.

The results showed that there was a significant difference in the means of the different physical resources influencing the implementation of the learners' psychomotor activities in the curriculum $\{F(6, 25) = 2.840, p = .000\}$. The null hypothesis was therefore, rejected and the alternative hypothesis accepted that there is a significant difference between physical resources and implementation of the learners' psychomotor activities in the public pre-primary school's curriculum in Vihiga County.

5.2.3 Influence of parental participation and implementation of learners' psychomotor activities

The finding showed that a majority of parents lacked effective cooperation with the teachers, did not provide adequate equipment and materials, provided unsafe learning environment at home, did not provide adequate guiding and counseling, and did not inculcate positive attitudes and expectations to implement their children' psychomotor activities in the public pre-primary school curriculum. Nonetheless, a majority of the parents actively participated in attending class consultative meetings to deliberate on the implementation of the learners' psychomotor activities in the public pre-primary school curriculum.

The results showed that there was a significant difference between parental participation and implementation of the learners' psychomotor activities in the public pre-primary school's curriculum in Vihiga County. The finding showed that $F(6, 25) = 8.661, p = .004$. The study, therefore, rejected the null hypothesis and the alternative hypothesis accepted that there was a significant difference between parental participation and implementation of the learners' psychomotor activities in the public pre-primary school curriculum in Vihiga County.

5.2.4 Influence of policy factors and implementation of learners' psychomotor activities

The finding showed that a majority of the respondents agreed that policy factors influence the implementation of learners' psychomotor activities in the public pre-primary school curriculum. The respondents agreed with the policy factor that public pre-primary school education should be under the county government in regards to

employment of teachers and school funding. A majority of the respondents held the view that payment of levies by the parents facilitated timely sourcing of teaching/learning resources, which enhanced participation in the learners' psychomotor activities in the ECDE curriculum. The respondents asserted that the government policy on parents paying for ECDE services had a greater influence on the implementation of the learners' psychomotor activities curriculum. However, it was established that funding of the public pre-primary schools by the central government and the county government lacked timeliness and consistency.

The finding established that the employment of professionally trained ECDE teachers by the county government promoted the learners' participation in psychomotor activities. However, the finding of the study established that the government policy on minimum land size of 0.25 acres for rural high density and 0.5 acre for rural low density created an appropriate environment for the promotion of learners' psychomotor activities. However, a majority of public pre-primary schools lacked adequate spacious and playgrounds. The findings also established that the government policy on the availability of clean and safe drinking water in most public pre-primary schools promoted implementation of the learners' participation in the psychomotor activities to eliminate tiredness and the need to quench their thirst.

The result showed a significant difference between the policy factors and implementation of the learners' psychomotor activities in the public pre-primary school curriculum with $\{F(6, 25) = 9.983, p = .000\}$. Thus, the null hypothesis was rejected and the alternative hypothesis accepted that there is a significant difference between the

policy factors and implementation of the learners' psychomotor activities in the public pre-primary school curriculum.

5.3 Conclusion

Based on the findings of the study, the researcher concluded that the participation of learners in the psychomotor activities largely depended on the teacher factors. These included the development of positive attitudes in psychomotor activities, teaching all activity areas in the curriculum as prepared by the Kenya Institute of Curriculum Development (KICD). The study held that teachers should not use the psychomotor activities as punishment for the wrongdoers to reform their character.

The study also concluded that the adequacy of the physical resources created a difference in the implementation of the learners' psychomotor activities in the public pre-primary school curriculum. The study concluded that most of the public pre-primary schools in Vihiga County did not have adequate physical resources like a merry-go-round, see-saws, slides, swimming pools, materials and equipment, playgrounds, and First Aid Kits for implementation of the learners' psychomotor activities in the public pre-primary school's curriculum.

The study further concluded that policy factors such as; funding pre-primary school curriculum by the parents, employment of professionally trained and qualified teachers by the county government, and provision of adequate land size enhanced implementation of the learner's psychomotor activities in the public pre-primary school curriculum in Vihiga County.

5.4 Recommendations

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

- The Ministry of Education and the Teachers Service Commission should encourage teacher development programmes to facilitate implementation of learners' psychomotor activities.
- The Ministry of Education, Kenya Institute of Curriculum Development and the County Governments should provide adequate physical resources to facilitate implementation of learners' psychomotor activities.
- Parents should be encouraged to actively participate in the pre-primary school programmes that promote learners' psychomotor activities.
- The Ministry of Education, the County Governments and the public pre-primary school Board of Management should come up with appropriate policy factors that influence implementation of learners' psychomotor activities.

5.5 Suggestions for further research

The research study recommends the following:

- This study was based in public pre-primary schools. A similar study should be carried out in private pre-primary schools in Vihiga County.
- A similar study should be conducted in other Counties in Kenya to either agree or disagree with the findings of this study.

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Appendix I: Distribution of the target population in Hamisi Sub County

Table 3.1: Target Population

Zones	Head teachers	Teachers	Parents	ECDE supervisors	Total
Shaviringa	26	26	26	2	80
Shamakhokho	16	16	16	2	50
Tambua	13	13	13	2	41
Gisambai	21	21	21	2	65
Chepkoyayi	21	21	21	2	65
Banja	13	13	13	2	41
Total	110	110	110	12	342

Source: Hamisi Sub County Education Office (2016)

Appendix II: Introductory Letter

Jaramogi Oginga Odinga
University of Science and Technology
Department of SNE and ECE
Po Box 210 -40601
Bondo

Dear Sir/Madam,

REF: RESEARCH ON “SELECTED FACTORS THAT INFLUENCE THE IMPLEMENTATION OF LEARNERS' PSYCHOMOTOR ACTIVITIES IN THE PUBLIC PRE-PRIMARY SCHOOL CURRICULUM IN KENYA.”

I am a postgraduate student in the Department of Special Needs Education and Early Childhood Education carrying out a study on selected factors that influence the implementation of learners' psychomotor activities in the public pre-primary school curriculum in Kenya. I have sampled your institution to help me get necessary data.

Information gathered in this study will be used for academic purposes and not for any other purpose. Your identity will be concealed therefore do not write your name or identify yourself anywhere on the instruments. You may contact me on 0724351933 or my supervisors: Dr Benson Charles Odongo 0713748047 or Dr Bernard Mwebi 0727741394. Thank you in advance.

Thanks for your co-operation

Yours faithfully,

Arthur Ahinda Avosa

Appendix III: Notification letter of intended research to Sub County ECDE

P.O BOX 329,

KAIMOSI.

5TH JANUARY, 2016

THE SUB-COUNTY DIRECTOR OF EDUCATION,

HAMISI SUB-COUNTY,

P.O. BOX 124,

HAMISI.

Dear Sir,

RE: REQUEST TO CONDUCT A RESEARCH STUDY IN HAMISI SUBCOUNTY

I am a PHD education student of Jaramogi Oginga Odinga University of Science and Technology. I am currently conducting a research entitled “Selected factors that influence the implementation of learners' psychomotor activities in the public pre-primary school curriculum in Kenya.”

The study aims to find out why outdoor play activities are not effectively conducted in ECDE.

I write to ask for permission to undertake a study in public preschool ECDE centers in Hamisi sub-county.

Yours faithfully,

ARTHUR AHINDA AVOSA.

Appendix IV: Notification letter to head teachers of selected public primary schools

P.O. BOX 329,

KAIMOSI.

6TH JANUARY, 2016.

THE HEAD TEACHER,

_____ PRIMARY SCHOOL,

HAMISI SUB-COUNTY.

Dear Sir,

RE: REQUEST TO CONDUCT A RESEARCH STUDY IN YOUR SCHOOL.

I am a PHD student at Jaramogi Oginga Odinga of Science and Technology (JOOUST). I am currently carrying out a study entitled “Selected factors that influence the implementation of learners' psychomotor activities in the public pre-primary school curriculum in Kenya.”

The study aims to find out why outdoor play activities are not conducted effectively in ECDE centers.

I write to ask for permission to undertake the study in your school.

Yours faithfully,

ARTHUR AHINDA AVOSA

Appendix V: Research Description

I am a PHD student at Jaramogi Oginga Odinga University of Science and Technology (JOOUST). I am currently undertaking a study titled “Selected factors that influence the implementation of learners' psychomotor activities in the public pre-primary school curriculum in Kenya.”

I intend to interview ECDE lead teachers, teacher trainers, head teacher and interview preschool pupils.

Some discussions will require taping using tape recorder. I will be the only person to access the taped discussions.

Yours faithfully,

ARTHUR AHINDA AVOSA

Appendix VI: Participants Consent Form

I am Arthur Ahinda Avosa a postgraduate student at Jaramogi Oginga Odinga University of Science and Technology working under the guidance of Dr. Benson Odongo and Dr. Bernard Mwebi. I am in the process of collecting data on the topic “Selected factors that influence the implementation of learners' psychomotor activities in the public pre-primary school curriculum in Kenya.”

I am inviting you to participate in the interview which will take 20 minutes of your time. The aim of this study is to help the parents and the stakeholders to understand importance of play. While there are no direct benefits to you as an individual, this study might help the head teachers of the schools to acquire skills and knowledge to deal with parents and pupils and work tirelessly in ensuring that the main benefit of play are prioritized in their schools and parents may also be able to allow learners to participate freely in play in the schools. Your participation is voluntary and you may stop at any time in the process of your response. This study is purely academic and you are not required to identify yourself or have your name written anywhere in this document. Please sign below if you consent to be included in the study. If you feel that your right as a participant is being infringed on, please contact me on 0724351933 or my supervisor on 0713748047 or 0727741394.

Please append your signature here to confirm your acceptance to participate in the study.

Signature.....

Date.....

Appendix VII: Questionnaire for the public pre-primary school teachers

This questionnaire is to collect data purely for academic purpose. The study seeks to investigate on selected factors that influence the implementation of learners' psychomotor activities in the public pre-primary school curriculum in Kenya.

All information will be confidential.

Answer all questions by either filling in the blank spaces or ticking the option that applies

SECTION A: BIO DATA

- i) Indicate your gender: male female
- Age 21-30 41-50
- 31-40 above 50
- ii) How long have you been a preschool teacher?
- 1-3 years 4-6 7-9 above 10
- iii) Indicate your highest level of education
- KCPE/CPE DIPLOMA ECE
- KCSE/KCE B. ED ECE
- CERTIFICATE IN ECE POSTGRADUATE
- OTHER SPECIFY
- iv) Indicate your years of experience as an ECDE teacher
- \leq years [] 4-6 years [] 7-9 years []
- ≥ 10 years []
- v) What is the total number of children in your class?
- Less than 10 21-30
- 11-20 Above 31

vi) How frequent do you take your preschoolers for physically activities per week?

Rarely once Always

Never

(ii) Comment on your answer above _____

vii) Do all your preschoolers have games kits?

Few Yes NO

viii) Does your preschool have the following?

Adequate playground YES NO

Swimming pool YES NO

Rollers YES NO

Merry go round YES NO

Climbing frames YES NO

Swings YES NO

Sandpits YES NO

Tyre tunnels YES NO

Wendy houses YES NO

Slides YES NO

Adequate balls YES NO

Adequate ropes YES NO

Can the preschool YES NO

Offer first AID

PARENTAL PARTICIPATION

Using a scale of strongly disagree=1 (SD), Agree=2 (A), Neutral=3 (N), agree=4 (A), and strongly agree=5 (SA), choose the most appropriate response based on the five Likert scale below.

Items	SD	D	N	A	SA
Parents cooperate with the teachers concerning the implementation of the learners' psychomotor activities in the curriculum at home					
Parents provide psychomotor activity materials and equipment at home and at school					
Parents have high expectations about their support to the children's psychomotor activities					
Parents are involved in attending class consultative meetings					
Parents provides safe environment at home for the children psychomotor activities in the curriculum					
Parents provide guiding and counselling to their children on inculcating positive attitude on the psychomotor activities					
Parents make contacts with schools on children follow-up activities on the psychomotor activities at home					

Appendix VIII: Questionnaire for public pre-primary school head teachers

This questionnaire is to collect data that is purely for the academic purpose. The study seeks to investigate on selected factors that influence the implementation of learners' psychomotor activities in the public pre-primary school curriculum in Kenya.

Answer all questions by either filling in the blank spaces or ticking the option that applies

SECTION A: BIO DATA

i) Indicate your gender: male female

Age 21-30 41-50

31-40 above 50

ii) How long have you been a head teacher?

1-3 years 4-6 7-9 above 10

iii) Indicate your highest level of education

KCPE/CPE DIPLOMA ECE

KCSE/KCE B. ED ECE

CERTIFICATE IN ECE POSTGRADUATE

OTHER SPECIFY

iv) Indicate your age bracket

≤ 30 years [] 31-40 years []

41-50 years [] ≥ 50 years []

SECTION B

Kindly respond to the following statements expressing your views on influence of teachers factors on implementation of psychomotor activities in the ECDE curriculum where, SA = Strongly agree, A = Agree, UD = Undecided, D= Disagree, and SD = Strongly disagree.

Kindly respond to the following statements expressing your views on influence of teachers factors on implementation of psychomotor activities in the ECDE curriculum where, SA = Strongly agree, A = Agree, UD = Undecided, D= Disagree, and SD = Strongly disagree.

Item	SA	A	U	D	SD
Teachers ensure that the learners participate in the psychomotor activities					
The teachers have positive attitudes in the implementation of the learners' psychomotor activities					
The teachers age affects the participation in the implementation of the learners' psychomotor activities					
The teachers gender affect participation in the implementation of the learners' psychomotor activities					
Play facilities are adequate for the implementation of the learners' psychomotor activities					
Play equipment are adequate for the implementation of the learners' psychomotor activities					
The psychomotor activities are timetabled and implemented					

SECTION C

Head teachers' response on physical resources influencing the implementation of the learners' psychomotor activities in the curriculum.

Kindly respond to the following statements expressing your views on influence of teachers' factors on implementation of psychomotor activities in the ECDE curriculum where, SA = Strongly agree, A = Agree, UD = Undecided, D= Disagree, and SD = Strongly disagree.

1. Complete the following table by ticking according to your level of agreement

	Statement	SD	D	U	A	SA
A	Physical facilities are adequate	1	2	3	4	5
B	The play equipment and materials are adequate	1	2	3	4	5
C	The psychomotor activities are timetabled and implemented	1	2	3	4	5

SECTION D

Head teachers' views on influence of government policy on psychomotor activity in the ECDE curriculum

Kindly respond to the following statements expressing your views on influence of teachers factors on implementation of psychomotor activities in the ECDE curriculum where, VLI- Very Low Influence; LI-Low Influence; MI-Moderation Influence; HI-High Influence and VHI-Very High Influence.

Government Policy Factor	VLI	LI	MI	HI	VHI
County Government funding improves implementation of psychomotor activities in the ECDE curriculum.					
Paying of levies by parents facilitates timely sourcing of teaching /learning materials which enhances participation in psychomotor activities in the ECDE curriculum.					
Employment of ECDE teachers and assistant teachers by County government promotes participation in psychomotor activities in the ECDE curriculum.					
Insistence by the government on the minimum land acreage size enhances implementation of outdoor play activities in the ECDE curriculum					
Government insistence that all ECD centers must provide safe drinking water as well as play and learning equipment enhances involvement in psychomotor activities.					
Learning in ECD centers should be activity based and should be through play and the language of the catchment area (mother tongue) to be used in communication and instruction.					
ECDE centers are required to provide children with a snack during break time and a balanced diet lunch.					
All ECDE teachers should be professionally trained and qualified to handle the learners.					

1. In your independent information give four reasons why outdoor play activities are not conducted in pre-school. Start with the most common ones

Appendix IX: Focus group discussion for parents

1. Comment on how you provide your child with the learning equipment and materials to assist on the implementation of the learner's psychomotor activities in the pre-primary school curriculum.
2. How do you ensure your child has a planned timetable and a suitable environment for the implementation learner's psychomotor activities in the pre-primary school curriculum?
3. Explain on the supervision of your child's homework assignments on the implementation of the learner's psychomotor activities in the pre-primary school curriculum.
4. Kindly explain how you cooperate with the school on the implementation of the learner's psychomotor activities in the pre-primary school curriculum.
5. Explain on your preference between the academic-oriented and the psychomotor activities in the learners' implementation of the pre-primary school curriculum.

Appendix X: Focus group discussion for the Sub-County ECDE supervisors

1. How does age affect the implementation of the psychomotor curriculum activities?
2. What hindrances do you face from primary school's administration in the implementation of the psychomotor curriculum activities?
3. How adequate are the play facilities in your pre-school centers?
4. During pre-preschool teacher training, how adequate were they prepared for the implementation of the outdoor activities?
5. What is your view on the following factors on the implementation of the learners' psychomotor activities in your public pre-primary school curriculum?
 - ✓ Teacher factors
 - ✓ Physical resources factors
 - ✓ Parental participation
 - ✓ Policy factors

Appendix XI: Observation Schedule

Adequacy of the play grounds	Comment
Adequacy of the fixed play activities	
The frequency of the learners' attendance of psychomotor activities	
The psychomotor activities that learners are engaged in	
The availability of the working time table and bell	
Preference of the teaching other than the psychomotor activities	
Parents do not prefer the psychomotor activities	

Appendix XII: Document Analysis Schedule

Item	Comment
The professional qualification of the teachers	
The preparation of the teachers professional records of work	
The teacher staffing	
Parents attending the class consultative meetings	
The availability of the policy guidelines	

Appendix XIII: County Director of Education Authority Letter For Research

MINISTRY OF EDUCATION

Telegrams
Telephone: (056) 51450
When replying please quote
Email:



COUNTY EDUCATION OFFICE,
VIHIGA COUNTY,
P.O BOX 640,
MARAGOLI,

REF: CDE/VIH/GA/19/34/16

21ST MARCH, 2016

The Vice Chancellor,
Jaramogi Oginga Odinga University of Science and Technology
P.O. Box 210,
BONDO.

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION-ARTHUR AHINDA AVOSA

The above named is a student at Jaramogi Oginga Odinga University of Science and Technology in Education.

This is to certify that he has been granted permission to conduct research titled; "Dilemma in implementing outdoor play activities in the Curriculum in Hamisi sub-county, in Kenya."

This permit is valid from 5th May, 2016 to 22nd March, 2017.

Any assistance given to him to accomplish the assignment will be highly appreciated.

The student is expected to submit two hard copies and one soft copy in pdf of the research to our office.

A handwritten signature in blue ink, appearing to read 'Wilson Omolo'.

Wilson Omolo

For: COUNTY DIRECTOR OF EDUCATION
VIHIGA COUNTY.

Cc:
Sub-County Director of Education – Hamisi

Appendix XV: NACOSTI Research Authorization



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349, 310571, 2219420
Fax: +254-20-318245, 318249
Email: secretary@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/16/41846/9533**

Date:

30th March, 2016

Arthur Ahinda Avosa
Jaramogi Oginga Odinga University
of Science and Technology
P.O. Box 210-40601
BONDO.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *“Preschool teachers dilemma in implementing outdoor activities in the school curriculum: A case study of Hamisi Sub-County, Kenya,”* I am pleased to inform you that you have been authorized to undertake research in **Vihiga County** for a period ending **22nd March, 2017**.

You are advised to report to **the County Commissioner and the County Director of Education, Vihiga County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

DR/STEPHEN K. KIBIRU, PhD.
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Vihiga County.

The County Director of Education
Vihiga County.



Appendix XVI: The location of Hamisi Sub-County

