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ECD CAREGIVERS: FINE AND GROSS MOTOR DEVELOPMENT KNOWLEDGE AND PRACTICES

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DECLARATION

This is my original work and has not been presented in any other university. Extra sources of information are accredited in the reference section.

MIKE KAYIRA

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DEDICATION

This work is dedicated to Kayira's family, who have worked industriously to see me through my Education.

ABSTRACT

Caregivers hold the key to the successful development of a preschooler's motor skills. The purpose of this study was to assess the knowledge and practices of early childhood caregivers regarding the fine and gross motor development of preschoolers in Lilongwe, area 36.

Questionnaires and an observational checklist were used to collect data. The data was analyzed through descriptive and inferential statistics.

The results demonstrated that 75% of the caregivers were within the productive age group, and 97.7% of the caregivers were female and married. The majority of caregivers had MSCE (77.2%), and 52.3% went through ECD training. Caregivers lacked knowledge in many crucial dimensions of motor development, which, among others, include individual differences affecting motor attainment, handedness, and interventions helping preschoolers attain normal motor skills. The presence of motor practices like jumping, dancing, matching, molding, coloring, packing, and throwing, among others, in ECD schools, depending on the preschooler's age, provides preliminary support for a potential preschooler's motor development.

The study recommends more reflective training on activities promoting motor development rather than wide-ranging training on what ECD is all about, how to teach, and how to make learning materials. Furthermore, the absence of caregivers planning and intentional support of preschoolers motor skills merits further consideration in a curriculum suitable for preschoolers's motor development. Lastly, the study recommends further research on handedness (left, right, and both-handed) as a contributing factor to motor development, considering that both-handed children do worse on motor activities.

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LIST OF ACRONYMS

ECD Early Childhood Development

ECDP Early Childhood Development Programmes

SPSS Statistical Packages for Social Sciences

PA Physical Activity

ISAMA Independent School Association of Malawi

MSCE Malawi school Certificate of education

JCE Junior Certificate of Education

PSLC Primary School Living Certificate

MDAT Malawi Developmental Assessment Tool

CCAP Church of Central Africa Presbyterian

1.0 INTRODUCTION

1.1 Background information

A caregiver is a person who takes care of the child and is the primary source of support and stimulation, whether related or not. Motor development refers to actions that involve the movement of muscles in the body (Eliason et al., 1986). Categorized into fine motor skills (smaller body actions, such as grasping writing) and gross motor skills (acquisition of movements that promote an individual's mobility), It is influenced by factors such as practice and appropriate instruction provided by caregivers. Early motor development is the basis for all future motor skills. In ECC, knowledge among caregivers helps them understand and develop motor skills practices (Bobbio et al., 2009). Furthermore, caregivers understanding of a child's growth and development will make it easier for them to apply motor practices in their classroom. It was important to look at caregiver practices in preschool settings in terms of caregiver training in motor development and how teachers create developmentally appropriate motor activities (Robinson et al., 2012). Early developmental skills provide a solid foundation for the more integrated motor skills required in the upper grades. It is often more beneficial to use this time of readiness to create a foundation for future school tool use (Yakimishyn & Magill-Evans, 2002). But conversely, in Malawi, observation in one study conducted in Zomba showed that when preschoolers were asked to draw objects, the teacher did not attend to what they did but just responded with a casual okay (Kholowa, 2007). Motor skills permit children to fully explore and support development in all other domains. Motor activities give preschoolers information about the world to build new understandings, develop thinking skills, and through interaction during activities, confidence, language, and social skills are also developed. This clearly demonstrates that neglecting motor activities means affecting other dimensions.

1.2 Problem statement and justification

The earliest years of life are pivotal in forming the foundations for healthy motor development. Caregivers accept responsibility for actively supporting children's development and acquiring important knowledge and skills. Developmentally appropriate practice requires that teachers integrate the many dimensions of their knowledge base. However, many children in developing countries (Malawi inclusive) are not able to develop to their full potential because of serious

deficits in health (physical and mental), nutrition, and proper cognitive and non-cognitive stimulation. The effects of delayed motor development in the early years can be deleterious and long-lasting, reinforcing a poor foundation of motor skills that permit preschoolers to fully explore and function in their environment and support development in all other domains. For instance, interviews in Zomba with preschool caregivers revealed that they often could not make the connection between the activities that they were doing and their importance (Kholowa, 2007). Therefore, there was a need to find out the motor practices and test the knowledge of caregivers on preschoolers's motor skills. It is well documented that it is better to encourage children's participation in motor activities rather than forcing writing activities when children are not ready (Thompson, 2006). Theorists also proposed that motor skills could be improved through practice, learning, and environmental interaction (Gallahue, 1998). Having good gross motor skills is an important building block for future motor skills. For instance, being able to sit at a desk requires strong core muscles, and writing requires strength within the upper body (McCarthy, 2011).

1.3 Research impact

The expected impact of this research was to understand the child's level of development before helping him or her master motor skills because children reach developmental milestones at different rates. Furthermore, assist in improving the quality of current early childhood practice

1.4 Objectives

1.4.1 Main objective

To assess the knowledge and practices of early childhood school teachers on fine and gross motor development among preschoolers

1.4.2 Specific objectives

To assess knowledge of early childhood school teachers on fine and gross motor development on preschooler

To assess the practices of early childhood school teachers on fine and gross motor development on preschoolers

1.5 Research questions

Do ECD teachers know about fine and gross motor development among preschoolers?

Do ECD teachers have practices that promote motor development on preschoolers?

2.0 LITERATURE REVIEW

Different writers and researchers have come up with different views on what motor development is. Most of the research suggests that actual motor skill competence and how children feel about their skills is the key to understanding participation in physical activity.

In one study conducted in Zomba to practice fine motor skills. Children were asked to draw objects on sand like cars or people. Observation notes indicate that one little boy enthusiastically calls to the caregiver 'Ine ndajambula [galimoto] yanga yaikulu aphunzitsi' ['Teacher, I have drawn a very big car']. The teacher remained sitting under a tree and responded with a casual 'Okay'. Which may show lack of seriousness among preschool teachers on the fine motor practices.

According to a study conducted in Bridgewater, Massachusetts by Colette M.L (2016), on examining of preschool educators' implementation of motor activities, the results showed that the teachers did understand that children need to develop their gross and fine motor skils. The ways in which the teacher achieved that was to allow the children a prescribed amount of practice time. However, the activity and practices introduced did not encourage the participation of all the children in the room. One issue was that the teacher did not help, guide and assist the children. In a similar study conducted by Dercheid et al, (2010) determined that teacher modeling and assistance increase the participation of children in practices and by developing a systematic and developmentally appropriate approach to scaffolding motor learning practices of the desired behavior can be effective in engaging preschoolers.

In another study done by Robinson et al., (2012) on questions whether early childhood educators know about motor programs or how to run a mastery climate movement program. Indicates the need for understanding the teachers knowledge on fine and motor skills is vital because the educators understanding of teachers on a child's motor growth and development will make it easier for them to apply different activities or practices in their classroom environment. Furthermore the study states that it is important to look into the teaching practices in preschool settings in terms of

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teacher training in motor development, and how teachers create developmentally appropriate motor activities.

In SA a study conducted by Breytenbach, (2013) that focused on determining the current status of motor proficiency of children found that after completion of the 12-week motor skills development. The mastery of motor skills may influence and benefit and enhance the ability of children to learn and master new and more complex movement skills within and outside the classroom environment. Further the study also noted that, due to the fact that children spend a great part of their day at school and in the classroom setting, practices provide opportunity and vital role in the acquisition and mastery of important motor skills and subsequently affect the physical activity and developmental future of children.

Along with these findings, Grantham-McGregor, (1999) suggests that it is likely that millions of young children are failing to reach their potential in development. It further state that the motor proficiency of children may serve as an appropriate target for developing motor skills and increasing physical activity in school environment through different practices plays a critical role in the development of motor skills. Therefore, the provision of structured opportunities to participate in goal driven practices may facilitate the improvement of certain motor skills such as balance and bilateral coordination.

In study conducted in Ireland by Gaul (2014) show that the level of fine motor proficiency in the children among 6-8 year olds is reaching the expected levels. This suggests that young children are receiving opportunities for practice and appropriate levels of fine motor task stimulation during infancy till the early years of primary school. It further indicates that children that do not like to practice are at risk of developing lower levels of motor competence and self-efficacy which can drastically affect their participation in PA throughout their youth and into adulthood.

Furthermore in study conducted in Australia by Banu, (2012) on exploring the quality of classroom teaching practices highlights that practices in early childhood have serious implications for the children's motor and cognitive development. In particular, one of the implication was that teachers' beliefs and attitude influenced their teaching practices in classrooms of the preschools. The study further reveal that it is very important to observe and interview teachers about their work in order to understand what they do, how they do it and the reasons that form the basis of their

daily work. Because young children are subjected to teacher directed teaching, coaching, memorizing of facts through rote learning, and frequent testing to prepare them to pass primary school entrance examination and get a chance to enter their favorite primary schools.

In addition study conducted in china by Wei, (2016) research on status quo of fine motor skill of children aged 3 to 6 the results showed that children stage is a key stage of fine motor development. This research finds out that children have generally low fine motor skill levels, and few children can reach the reference standards of fine motor development set for children. Therefore, it is necessary to enhance cultivation of fine motor skill of children at this age. The results further indicates that in order to promote children's fine motor development, one important approach is to strengthen curriculum suitable for children's fine motor development and appropriately give training of fine motor to children. For teaching methods and forms, it is necessary to pursue diversity and innovation, to inspire children's interest in exploring and operating by hands.

3.0 METHODOLOGY

The intent of this study was to assess the knowledge and practices of early childhood caregivers on fine and gross motor development among preschoolers in Malawi.

3.1 Study area

The study was conducted in Lilongwe district specifically area 36, because there are many ECD schools in the area and accessibility in terms of transport was much easier hence best suited for this research

3.2 Research design

A cross sectional study whereby a combination of qualitative and quantitative approaches were followed in this study. Qualitative approach in the fact that it allowed to focus on the process of how it happened in this case the practices and quantitative were used in analyzing these issues numerically.

3.3 Data collection and instruments

The study used questionnaire for interviews and observational checklist, these methods were chosen because they complement each other

3.4 Sampling method and sample size

It was based on purposive sampling which aimed at selecting cases which provided rich information in respect to the purpose of the study. The emphasis were ECD teachers and preschoolers with a sample size of 88 (44 caregivers and 44 preschoolers) respondents. Because the population was unknown, the sample size was derived by computing the minimum sample size in the formula.

Equation 1:
$$n = \frac{z \cdot 2 \cdot (\sigma)(1-\sigma)}{c \cdot 2}$$

By plugging in Z (Z-score)=1.64, Standard of Deviation(σ)=0.2, and c(margin of error)=10% or 0.1 into equation 1

Necessary Sample Size = $(Z\text{-score})^2 * StdDev*(1\text{-StdDev}) / (margin of error)^2$

$$((1.64)^2 \times (.2(1-.2)) / (.1)^2$$

 $(0.43) / .01$

43

3.5 Analytical techniques and computer packages

The data collected were analyzed using excel and SPSS as for quantitative and thematic for qualitative data. Both quantitative and qualitative data was entered and analysed in descriptive (means, percentages and correlations) and inferential statistics.

3.6 Ethical considerations

When dealing with people as in this research, considering ethical issues was vital. It is not a surprise that such kind of a research poses moral and ethical dilemmas. The study followed the ethical principles so that it brings no stress or anxiety to the participants. As such, consent from LUANAR authorities, head teachers and the caregivers involved was important. This was obtained before the commencement of the research.

4.0 RESULTS

4.1 Demographic chapter

Caregivers provide early childhood care and education through a variety of teaching strategies. ECD caregivers are the most important persons in which children lives. Demographic characteristics of the forty four caregivers were investigated to draw comparisons and provide a strong outline of the participants of the study.

Table 1.0 Demographic measure of dispersion and percentages

Demograph	ic characteristics of caregiver	Percentage	
	Married	70.5	
	Single	20.5	
Iarital status	Separated	4.5	
	Widowed	4.5	
ex	Female	97.7	
	Male	2.3	
	Mean ± standard	deviation	
ge	35±11		

Training institution	Content covered(n)			
	How to make learning	What and how	What ECD	Handling
	materials	to teach	is about	preschoolers
NGOs and colleges	5	8	1	7
Ministry of gender	4	4	2	5
ISAMA	3	3	1	4
Social welfare				1

4.1.1 Marital status, age and sex

Results indicate that most of the caregivers were female and married. It further show that 75% of the respondents were within productive age group of 21-40. This provide an indication of the impact female married caregivers within the productive age group have on the study, in terms of caring and attachment on the preschoolers.

4.1.2 Caregivers level of education

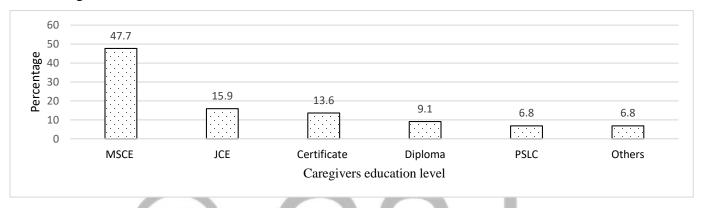


Figure 1.0 Caregivers level of education

Results on caregivers level of education, shows that most caregivers had MSCE. This indicate an improvement in the level of education to the study conducted in Zomba where most of the caregiver's highest level of education were a Standard 6 (Kholowa, 2007). This scenario may add credibility of their contribution to pre-school children in learning.

4.1.3 Caregivers Training

The results show that 52.3% caregivers went through a training session. This points out to the notion that most of the caregivers are qualified and therefore are likely to commendably deliver ECD programme to children. The source of training were the Ministry of Gender, (13.6%), organization and vocational schools (SOS) (25%), social welfare (2.3%) and ISAMA (11.4%). Furthermore 75% of the caregivers were between the productive age 21 and 40. This means that as person grows older they are less likely to take up training opportunities than younger or midlife workers.

4.1.4 Content covered during training

The results on what was covered during training indicate deficient content were covered during the training. This may depict little ECD caregiving understanding but training should remain the priority in recognition of the vital role well trained caregivers play in the quality of ECD.

4.1.5 Caregiver's experience

From the results on caregivers experience majority of the caregivers have been in the profession for less than five with a mean and SD of 8 ± 7 . This on the other hand means that most of the caregivers cannot selects appropriate models of instruction to teach the preschoolers (Bell, 1978). Further to that Hanushek, (2001) state that experience is applicable after first five years of teaching and a caregiver is believed to have gained variety of skills and knowledge.

4.2 Knowledge on the motor development

The first objective of the research project was to determine knowledge of caregivers on motor development of pre-schoolers. The purpose of knowledge test on motor development were to verify participants' knowledge regarding fine and gross motor activities among pre-schoolers.

Table 2.0 Summary of results on knowledge of motor development

Knowledge of motor develop	Percentage	
Principles of motor	Cephalocaudal principle	75
development	Proximodistal principle	27.3
	Physical defects	86.4
Individual difference	Sex	54.5
affecting the rate of	Environment	45.5
individuals	Age	27
	Culture	4.5
Handedness as part of motor development	True	36.4
	Remedial time	61.4
Intervention for	Involving in simple or repetition	27.3
preschoolers motor delay	and changing of activities	
	Motivation and encouragement	13.6
	Close monitoring	4.5

4.2.1 Principles of motor development

The results shows that only 15% caregivers were unknowledgeable about cephalocaudal principle. The Pearson correlation further depict significant correlation (r=0.451, p=0.002) between knowledge of cephalocaudal principle and attaining training on motor development of the preschoolers. On the other note 72.7% caregivers indicated deficit in knowledge on proximodistal principle. The Pearson represented insignificant positive correlation between proximodistal and training done (r=0.044, p=0.779). Therefore in order to escalate knowledge, caregivers training should reflect more on proximodistal among other areas of motor development.

4.2.2 Caregivers' knowledge on individual differences affecting motor attainment

4.2.2.1 Culture

The results indicate that 95.5 % caregivers felt that culture does not play role in affecting the rate and age individuals reach motor stage. The calculated Chi-square (Model) is 350 with p-value of 0.554, which is more than 5% hence insignificant. This therefore may instruct that caregivers experience and wide-range training does not increase knowledge on how culture plays a role on motor development but relatively specific training. According to Rogoff (2003) motor development is influenced by cultural expectations related to gender roles, independence, autonomy and opportunities they are given (or not given) which impact motor development.

4.2.2.2 Environment and parenting styles

The results indicate that 54.5% caregivers lacked knowledge on environment and parenting styles. This therefore may edict that caregiver's level of education does not define or increase the knowledge caregivers have on preschooler's environment where they can explore motor activities.

4.2.3 Handedness as part of motor development

The results on handedness shows that 63.6% of the respondents didn't know handedness as a factor that can greatly affect gross and fine motor development. This may mean that children that are left handed or use both hands are disadvantaged when it comes to motor activities. According to Johnston et al (2007) handedness has to be considered in child development. This is because of huge difference in fine and gross motor activities between left-handed and right-handed children. Both-handed children do worse than left and right-handed (Johnston et al, 2007).

4.2.4 Interventions helping preschoolers attaining normal motor development

4.2.4.1 Motivation and encouragement

Results show that 86.4% caregivers paid little attention to encouraging, motivating preschoolers, however appropriate instruction and motivation provided by caregivers help to influence preschooler's motor development. Insignificant relationship existed between caregivers experience and motivating a child (t=1.46, df=42, P=0.149). This may therefore picture a poor preschooler's motor development resulting from lack of knowledge and inexperience on motivation and encouragement.

4.2.4.2 Close monitoring

Results on close monitoring as one of the intervention for preschoolers to attain motor development indicate that 95.5% caregivers had deficit knowledge. A t-test concluded that the number of hours a caregiver spend at school is insignificantly associated with close monitoring preschoolers (t=-0.782, df=42, p=0. 438). Relatively child's motor growth and development can be monitored by those close to them. However deficit in knowledge on monitoring preschooler's motor development may mean no regular contact between the preschooler and caregiver putting risk to child health and motor development.

4.2.4.3 Involvement in simple or repetition and changing of activities.

The fallouts on involving preschoolers to simple, repetition and changing activities on helping preschoolers to attain motor development show that 72.7% caregivers did not change or repeat the activities to the ones having the delays. Further thinking back to learning to ride a bike or play a new sport, repetition is the mother of learning and the father of action which makes it the architect of accomplishment. This therefore possibly indicate poor learning of motor development.

4.2.5 Importance of motor development.

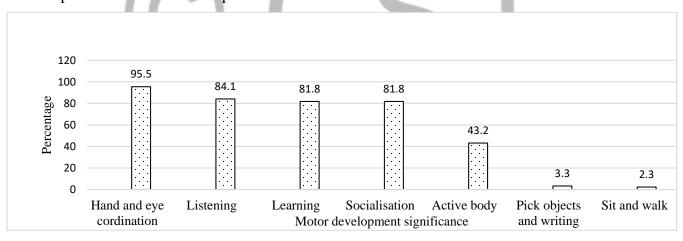


Figure 2.0 Importance of motor development

4.2.5.1 Hand and eye coordination

Results on hand and eye coordination as one of the importance to preschoolers motor development show that 4.5% of the caregivers did consider hand and eye coordination as motor skill significant to how preschoolers write, play indicating shortfall of knowledge by 95.5%. Majority of the

respondents had no experience this may negatively affect preschooler's cognitive and social skills which are some of the areas improved by hand and eye coordination.

4.2.5.2 Learning

The results shows that 18.2% of the caregivers had knowledge that children learn through play. This may possibly affect preschoolers to experiment, learn problem solving skills through play. Furthermore 75% of the caregivers were within the productive age group yet deficit in knowledge.

4.2.5.3 Socialization

The motor practices of preschool children is rich in emotional expression and social interaction however the results indicate that only 18.2% of the caregivers had knowledge. Besides 52.3% caregivers having gone through training caregivers indicated lack of knowledge. This may results in preschoolers delayed social skills.

4.3 Caregivers practices promoting fine and gross motor

The results showed that all schools (100%) had practices promoting fine and gross motor. From observation the ways in which the caregivers achieved the practices were to allow the children a prescribed amount of outdoor performance time, or to set up indoor obstacle courses when weather precluded outdoor activity.

However, there did not appear to be a structured program for engaging children in motor activities, nor did there appear to be scaffolding of motor developmental steps. Despite 52.3% going through training on what ECD is about no relationship appeared between the motor practices done by schools and preschoolers motor development. This therefore would portray that training done did not specify the use of the activities on motor development of preschoolers.

4.3.1 Age groups having different practices

Results on age groups having different motor practices depending on their age showed 97.7% caregivers did evidence having different practices for different age groups of preschoolers. From observation almost all ECD schools divided preschooler's classes into junior, middle and senior groups and so were the activities. This may perhaps mean that caregivers recognize that each child develops at his/her own pace hence grouped activities. Based on t-test, results show significant association between the number of hours a caregiver spend at school and having different practices for different age groups (t=2.144, df=42, p=.038).

4.3.2 Motor practices assessment

Results on motor practices assessment showed that 97.7% caregivers did assess preschoolers by observing, followed by talking to the child 95.5%. Furthermore 90.9% caregivers did not custom parents as necessary in assessing the motor delay of preschooler. This may stipulate missing of the critical information about a preschooler. A t-test indicated insignificant association between age of the caregiver and the use of parents in motor assessment (t=932, df=42, p=.357).

On the other note 97.7% caregivers did not assess preschoolers through medical reports. A t test indicated insignificant association between caregivers experience and medical reports (t=-.118, df=42, p=.907). This may indicate missing the health snapshot of the preschoolers there by not knowing their strength and weaknesses when introducing the practices to the preschoolers.

4.3.3 Motivation on motor practices

The results on motivating preschoolers show that 79.5% of the caregivers use remedial time to motivate the preschoolers to participate in practices at school. Since some preschoolers discover or master difficult concepts and improve their grades on their own remedial time may positively upgrade the preschoolers.

It further indicate that only 2.3% of the caregivers use guardians. Since most of the preschoolers they engage in many activities or practices with assistance this would mean poor performance in some activities. Experience was insignificantly associated with guardians as a way to motivate preschoolers participation (t=.118, df=42, p=.907). Likewise 95.5% caregivers did not use a variety of playing materials to motivate preschoolers on motor activities. Insignificant relationship between age and a variety of playing materials used in motivating (t=.373, df=42, p=.711). This could depict poor stimulation of imagination and creativity of the children.

4.4 Checklist observational preschoolers motor activities and caregivers training

The study on observational activities on motor activities depending on preschooler's age was guided by MDAT. Understanding MDAT can help caregivers in realizing needs of preschooler's motor development. The caregiver can use knowledge of the MDAT to structure both the lesson plan and the classroom environment. Bronfenbrenner (1979), advocates that factors present in the environment in which children live, and the inter-personal relationships influence children development. Therefore caregivers training is of paramount significance.

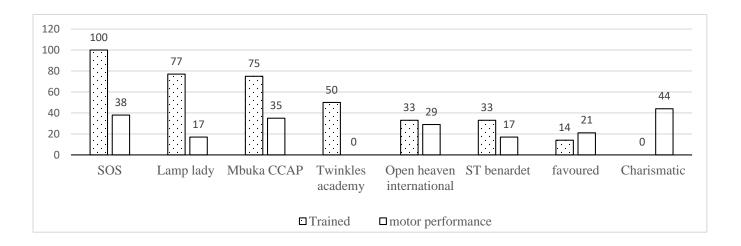


Figure 3.0 Schools training on motor development

Early motor developmental activities, such as griping, copying and jumping are predictors of later that permit children to fully explore and function in their environment.

On training SOS kindergarten had all caregivers trained on ECD and 38% of 32 preschoolers failed to perform collectively on the observational motor activities. SOS was preceded by lamp lady and Mbuka CCAP which had 77% and 75% caregivers trained respectively. These were followed by twinkles academy and open heaven international. Charismatic independent had no caregiver trained on ECD activities. On average the schools did well on preschooler's motor performance with only 25% of 176 preschoolers failing to perform the given activities. On preschoolers motor performance preschoolers from Twinkles academy did well because none (n=8) failed to perform the motor activities. Charismatic independent had poor performance with 44% failing.

5.0 CONCLUSION

The analysis presented in this report may clearly indicates caregiver's inadequacy of knowledge, in many areas of motor developmental. Furthermore caregiver's lack of understanding on importance of motor practices to preschoolers may mean to spend less enjoyable time with the preschoolers, reinforce less positive motor skills and less behavior monitoring.

Finally, all research ECD schools had activities promoting fine and gross motor depending on preschooler's age groups, however there did not appear a structured program or scaffolding on motor developmental steps. This may mean that caregivers had mild impacts on children's motor development.

6.0 RECOMMENDATION

Despite many going through training, caregivers' lack of knowledge in many areas of motor development were indicative of wide range training on what ECD is all about, how to teach and how make learning materials. The study therefore recommends that caregivers training program need to reflect more on what caregivers will need in the classroom rather than just knowing what ECD is about.

Based on the results all schools had practices promoting motor development and the study further noted that caregivers had no structured program(caregivers planning and intentional support) to promote preschoolers motor skills. The study therefore recommend awareness on the curriculum suitable for preschooler's motor development

Based on the results many caregivers did not a custom handedness as individual difference affecting the rate and age different individuals reach different motor stage. With this implication, the study recommend that further research should be done on handedness (left, right and both handed). This because according to Johnston et al, (2007), both-handed children do worse than left and right-handed

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8.0 APPENDICES

8.1 Questionnaire

KNOWLEDGE AND PRACTICES OF EARLY CHILDHOOD CAREGIVERS AND
EARLRY GRADE PRIMARY SCHOOL TEACHERS ON FINE AND GROSS
MOTOR SKILLS AMONG PRE-SCHOOLERS.
PREAMBLE
My name is MIKE KAYIRA,(140100426) a student from Lilongwe University of
Agriculture and Natural Resources, department of human ecology and I would like to learn
more from you about the knowledge and practices of early childhood caregivers and early
grade primary teachers of children aged 2-5 years on fine and gross motor skills among pre-
schoolers.
The information will be used for academic purpose and will be treated with the utmost
confidentiality and that my anonymity will be protected.
Feel free to share what you know about the knowledge and practices among pre-schoolers
motor development
Are you willing to participate? 0. Yes 1. No
Name of participants
SIGNATURE(Participant)

	SECTION A: DEMOGRAPHIC CHA	RACTERISTICS OF	THE CAREGIVER
A1	Name of the respondent		
A2	Sex	0. Male 1.	
		Female	
A3	Age		
A4	Marital status	0. Single	
		1. Married	
		2. Widowed	
		3. Separated	
A 5	11		
A5	How many years did you spend in class		
A6	Did you do any training on ECD	0. Yes 1. No	
A7	If yes	Where	
		For how long	
		By who	
		What was covered?	
A8	Years taken by respondent working?		
A9	What is the highest level of formal		
	education that you have completed?		
A10	Estimate the number of hours you spend		
	at school in a day?		
	SECTION B: KNOWLEDGE OF	N THE MOTOR DE	<u>VELOPMENT</u>
For some of	of the statement write "True" (0), "False" (1	l), or "I don't know" (3).

	KNOWLEDGE ON	THE PR	INCII	PLES OF MOTOR DEVELOPMENT		
B1	Fine and gross motor	0. Grow	th sta	rts first in the head region then moves	s C	$\overline{}$
	development follows a	downwai	rds to	ward the feet		
	predictable pattern and it	1. Growt	h star	ts from central (ie trunk) to the arms		
	shows general trends					
B2	Individual differences	0. Physic	al def	ects		
	affect the rate and age	1. Sex			$+$ \vdash	=
	different individuals reach				Щ	
	different motor stage and	Any othe	er			_
	the condition include					
В3	Are there any intervention the	nat help pr	e-sch	polers to attain normal motor developmen	t C	
B4	If yes what are these interve	entions?				
	KNOWLEDGE ON CA	ΓEGORI	ES OI	R TYPES OF MOTOR DEVELOPME	NT	
B5	Children are not born with p	perfect fin	e and	gross motor development?		
B6	Fine and gross motor are the	e same				
В7	Handedness is not part of m	otor deve	lopme	nt		
B8	Some of the importance of	of motor	Help	s a child to sit and walk		
	development include		Help	s a child to pick objects and write	\top	$\neg \vdash$
			Any	other)
	SECTION C: PRACTICE	S ON TH	E PR	INCIPLES OF MOTOR DEVELOPM	ENT	
C1	Are there practices that you	do to proi	mote	0= Yes skip to Q-C2 1= No	not p	roceed
	motor development?				_	
C2	What are the practices			Drawing)
						<u> </u>
				Running		

		Any other	
C3	Does different age groups have different	0= Yes skip to Q-2 1= No not proceed	
	practices		
C4	The following are used to assess a child	Observe the child using the	
	motor abnormality/delay or normal	objects	
		Talk to the child and observe the	
		interactions	
		Any other	
C5	How do you motivate or help someone with		_
	motor delay to participate in the activities that		
	his/her are doing?		

8.2 Observational checklist

	AGE	PRACTICE		YES(0)	NO(1)
	(YEARS)				
A1	2	Gross motor	Walks on tiptoes		
		Fine motor	Begins to approximate a regular grip for writing dots, lines and circles		
A2	3	Gross motor	Can jump back and forth		
		Fine motor	Can copy circle and cross shapes		
A3	4	Gross motor	Jumps over a piece of paper (A4 size)		
		Fine motor	Unscrews and screws back cap		

A4	5	Gross motor	Hops on one foot without support, has to go	
			four steps	
		Fine motor	Copies a circle	

