ZJER

IMBABWE JOURNAL OF EDUCATIONAL RESEARCH

Volume 27 Number 1
March 2015

UNIVERSITY OF ZIMBABWE

Volume 27, Number 1, March 2015
ISSN 1013-3445

Contents

Page

Nutrition, Health and Safety in Early Childhood Development Programmes in Selected Harare Primary Schools in Zimbabwe

Tendai Chikutuma

Belvedere Technical Teachers College

Abstract

This article investigates the nutrition, health and safety status in Early Childhood Development (ECD) programmes and its impact thereof on the quality of care and education in Harare primary schools as perceived by the school heads, ECD teachers and parents. The study is part of a larger study on assessing the quality of ECD programmes in Harare primary schools in Zimbabwe. A qualitative research design based on three in-depth interview guides for ten ECD parents, school heads and ECD teachers was undertaken with 30 participants from ten primary schools. Data were content analysed following each sub-research question. The analysis included direct reports of the participants' responses to in-depth interviews and tabulation of observation checklists. The study revealed that some schools failed to maintain their sanitary facilities, while others maintained them well.

The study further highlighted that the ECD teachers did not have first aid skills. Various recommendations were suggested including compulsory acquisition of accreditation certificates of operation as per Statutory Instrument 106 of 200; and establishing quality nutritious ECD feeding programmes that promote a holistic development of ECD children.

Introduction

Early Childhood Development (ECD) is defined as the period from pregnancy and birth to the age of eight years (Christie, 2008; Thomas & Thomas, 2009). This is generally divided into pregnancy and peri-natal care which entails pre-natal care, attended births registration and post-natal care (The World Bank, 2010). It is made up of the 0 to 3 years stage which involves parent education, early stimulation, nutrition interventions, home based care and crèches (Thomas & Thomas, 2009). The World Bank (2010) further states that ECD comprises 3 to 6 year olds and, at this stage, there is parent and preschool education. Finally, ECD also includes 6 to 8 year olds and is marked by transition to formal education and improved early primary school (Thomas & Thomas, 2009). The ECD concept thus encompasses everything from a child's nutrition, health and hygiene to cognitive skills, social and emotional development (Christie, 2008). The Early Childhood Development children referred to in this study are the four to five year olds.

Background information

Early Childhood Development is of great importance to the Zimbabwean Ministry of Education Sport Arts and Culture (Nziramasanga, 1999). Currently under the Ministry of Primary and Secondary Education, educational provisions and care for the 4-5 year olds is guided by Statutory Instrument 106 of 2005 which pegs guidelines to assure quality ECD aiming at quality health, safety, nutrition and education as indicators for the all-round development of learners. While guidelines specify the quality indicators, it has been noted that some poor quality ECD programmes are mushrooming all over Zimbabwe. This state of affairs contravenes the Statutory

Instrument 106 of 2005 which highlights that ECD centres may be registered and operated only if they conform to prescribed standards such as: a total of 2.25 square metres of indoors and 5.5 square metres outdoors playing space per child. The ECD learning environment is also required to have child-sized toilets in the ratio of one toilet to eight children as well as wash basins in the ratio of six children per basin.

According to Statutory Instrument 106 of 2005, the ECD environment should have child-sized furniture, hot and cold water and a ratio of 20 children per teacher. The statutory instrument further prescribes that the personnel to be employed in the ECD centre should have the appropriate training in ECD or should have experience in ECD. The statutory instrument also prescribes that personnel dealing with Early Childhood Development children should go for X-rays and medical check-ups every year and should they be found unhealthy the personnel should be given time off to take their medication until they are fit again to deal with ECD children. The current study sought to establish whether quality indicators in the legislature reflected the status of nutrition, health and safety in ECD programmes.

Marotz, Cross and Rush (2012) define nutrition as all processes used by a human being to take in food, and to digest, absorb, transport, utilise and excrete food substances. Hyde and Kabiru (2003) define health as a state or quality of total, physical, mental and social well-being where each element is considered to have an equal contribution. The provision of health, nutrition and safety promotes and supports the Early Childhood Development children's well-being. Health factors include cleanliness, environmental influences, consideration of children with

health problems or learning needs, nutrition, learning behaviour, licensing of the programme and immunisations stipulated by the government (Govindasamy, 2010; Thomas & Thomas, 2009). Physically and psychologically healthy children learn well (Myers, 2004; UNICEF, 2000) and a healthy development, especially in early years, provides the basis for successful formal experience (Govindasamy, 2010). Adequate nutrition is critical for normal brain development and early detection, and intervention gives children the best chance for healthy development (Gunhu et al, 2011). Though adequate nutrition is crucial, it may be lacking consequently interfering with healthy developmental patterns of ECD children.

Safety factors such as on-site availability of sanitary facilities, clean water supply, classroom maintenance, adequate space and the availability of appropriate furniture have an impact on the quality of ECD education (Myers, 2004). When the philosophy, curriculum, hiring of teaching staff, allocation of funds, arrangement of indoor and outdoor environment and collection of materials required is considered and implemented, safety is also taken into account (Govindasamy, 2010). The philosophy, curriculum, allocation of funds and arrangement of indoor and outdoor environments may not account for the safety of ECD children, hence the need to establish whether safety issues were addressed and the subsequent impact on the quality of ECD programmes. Increasingly, the benefits of preventive health, nutrition, and safety are becoming a quality indicator as suggested by the Zimbabwean Statutory Instrument 106 of 2005. Poor standards of health are seen by Ackerman and Barnett (2009) as significant barriers to ECD children's ability to learn. A study by Gunhu et al. (2011) on

adequacy and appropriateness of water, sanitation and hygiene in Masvingo rural areas concluded that the recommendations made in the Statutory Instrument 106 of 2005 were irrelevant. The Masvingo schools in the study did not have age appropriate toilets for 3 to 5 year-olds and this compromised the quality of ECD programmes. The current study sought to establish how health, nutrition and safety components were being implemented in Harare primary schools in Zimbabwe.

The International Convention on Human Rights Article 24 maintains that member states should recognise the right of the child to enjoyment of the highest attainable standards of health by way of combating disease and malnutrition through the provision of adequate nutritious food (Gunhu et al, 2011). Education and health are inseparable as nutrition deficiency, diarrhoea and worm infestations, related to inadequate sanitation and hygiene affect education (UNICEF, 2006). Studies in Bangladesh by UNICEF (2006) on de-worming and adequate sanitation found an increase in attendance and performance of learners when these were implemented. Poor sanitation leads to poor attendance and performance of learners consequently compromising the quality of ECD programmes. A Tanzanian study by Hyde and Kabiru (2003) also suggested that there was an increase in school attendance when clean water was available. Findings in a study by OECD (2006) on the evaluation of the impact of de-worming in Western Kenya highlight that worms in children contribute 25% to the overall absenteeism in schools. The same study warns that worm infestation affects intelligence quotient (IQ) levels threatening children's cognitive development. Water, sanitation and good health encourage behaviour development in children; they participate more, the burden of diseases can be lifted and

their opportunities are expanded (Hyde & Kabiru, 2003). The current study sought to establish whether water availability and sanitary facilities contributed to the quality of ECD programmes.

In one of its reports OECD (2006) highlights that the physical, emotional and cognitive development of children is a by-product of their health, nutrition and safety status. Poor sanitation, therefore, exposes children to diseases and the concomitant poor academic performance (UNICEF, 2000; Martinez, Naudeu & Pereira, 2012). Gunhu et al. (2011) state that a comprehensive health and safety programme ensures that a centre or school is prepared for children by putting water and sanitation infrastructure in place before enrolment. The availability of a health and safety programme enhances the children's physical and social development culminating in quality ECD programmes. A study by Gunhu et al. (2011) showed that the availability of soap for washing hands resulted in low incidences of diarrhoea and high attendance figures at school. Contrary to the above findings, an evaluation of school sanitation and hygiene education programmes in Burkina Faso, Zambia, Columbia, Nicaragua, Nepal and Vietnam revealed that the unavailability of soap was a major problem in most schools (UNICEF, 2006). Gunhu et al. (2011) found that water was scarce in schools in Masvingo and that the child-toilet ratio was above the stipulated 8:1 squat holes by the statutory Instrument 106 of 2005. In this context the study sought to establish the toilet to pupil ratio and the impact thereof on the quality of ECD programmes.

School heads and teachers' perceptions regarding hygiene indicated that they were concerned about the non-availability of child-sized sanitary facilities and water. They were also concerned about job-related factors such as the large teacher to pupil ratio as it affected the supervision of sanitary facilities (Waldfogel, 2006) which in turn, affected the quality of education and care they were able to provide.

Purpose of the study

The present study sought to establish the nutrition, health and safety status in ECD programmes in Harare primary schools. Specifically the study sought to provide an answer to the main research question: *What is the nutrition, health and safety status of ECD programmes in Harare primary schools?* The study is part of a larger study assessing the quality of ECD programmes in Harare primary schools in Zimbabwe

Methodology

Design

The research design, which was mainly qualitative, was used for this study. The qualitative design was preferred because it is the most appropriate design where perceptions of participants are sought *in situ* (Creswell, 2009) while the quantitative was useful for reporting observation checklist results. Patton (2002) states that in qualitative research, direct quotations and excerpts from interviews can be cited as they present the participants' perceptions. In the present study, verbal quotes from ECD teachers and administrators were relevant as they captured the participants' perceptions of nutrition, health and safety status in ECD programmes. As qualitative research is the interpretive study of a specified phenomenon or problem, the researcher becomes

central to the analysis of data (Denzin & Lincoln, 2005). When qualitative methods of collecting data are used, the data collected can be inaccurate because respondents are often untruthful or biased (Creswell, 2009). The researcher tried to create a warm environment during observations and interviews so as to build trust with respondents. Where necessary, probing was done to counter the weakness of perceived untruthfulness.

Sample

A sample is a representative selected number for a study whose characteristics exemplify the larger group from which it was selected (Patton, 2002; Denzin & Lincoln, 2005). A purposive sample was done of 10 primary schools in Harare consisting of 10 school heads, 10 ECD teachers and 10 ECD parents (14 males and 16 females). McMillan and Schumacher (2010) define purposive sampling as an approach whereby participants are selected because of the rich information they hold that is required to answer the research questions. The sample was drawn in Harare urban because that is where the researcher resides. Only schools and school heads with ECD programmes, ECD teachers and ECD parents were included in the sample.

Instruments

Observation checklists were used for the study. These were used at each of the ten schools under study to observe the nutrition, health and safety status of the play areas and activities of ECD children. Observations were successfully used to describe what was happening in context and why (Silverman, 2006).The observations that took place led to the follow-up in-depth interviews for triangulation purposes. According to Gay, Mills and Airasian (2011), an interview is a

purposeful interaction in which one person obtains information from another. In-depth interviews permit researchers to obtain important data that they cannot acquire from observation alone (Silverman, 2004).Three interview guides for the 10 school heads, 10 ECD teachers and ten parents were used in this study. The in-depth interviews were chosen to expose attitudes, interests, feelings that were not obvious through the observations (Gay et al., 2011). Interviews had the advantage that the researcher probed participants' responses to in-depth data about their experiences and feelings regarding nutrition, health and safety status of ECD programmes. The school heads' interviews were carried out mid-morning while parents were interviewed whenever they fetched the ECD children. The ECD teachers were interviewed after dismissing the ECD children. The researcher had a one on one interview after discussing the informed consent issues with the participants while a voice recorder captured the data. The recorded interviews and later on the transcribed notes were stored in a locked cabinet in the researcher's office where nobody had access to them.

Data collection procedure

Permission to conduct the study was sought from the Ministry of Primary and Secondary Education. The researcher observed the schools and conducted in-depth interviews after discussing the ethical issues. The researcher visited the purposively sampled schools and interviewed the participants at their convenient times. The school heads were interviewed in the morning, the teachers after dismissing the ECD children while the ECD parents were interviewed at the time of fetching their children. Permission to carry out the interviews was sought from the school heads.

Data analysis

Data were content analysed as per each sub-research question. The analysis included tabulating the observed results of nutrition, health and safety status and reporting verbatim the participants' responses.

Presentation and interpretation of results

Observation results on the nutrition, health and safety status in ECD

Table 1

Observation Checklist Findings on the Nutrition, Health and Safety of ECD Programmes

NHS Descriptor		Level of availability		Total
		Available	Not available	
i)	Well cleaned rooms	8 (80%)	2 (20%)	10 (100%)
ii)	Health Record Book	8 (80%)	2 (20%)	10 (100%)
iii)	Well maintained playground	7 (70%)	3 (30%)	10 (100%)
iv)	Disinfectants	8 (80%)	2 (20%)	10 (100%)
v)	Certificate of operation from the City Council	10 (100%)	0 (0%)	10 (100%)
vi)	NHS discussions	6 (60%)	4 (40%)	10 (100%)
vii)	Well cleaned toilets	5 (50%)	5 (50%)	10 (100%)
viii)	Balanced diet	2 (20%)	8 (80%)	10 (100%)
ix)	Well maintained play equipment	7 (70%)	3 (30%)	10 (100%)
x)	Adequate water	7 (70%)	3 (30%)	10 (100%)
xi)	First aid kit	9 (90%)	1 (10%)	10 (100%)
xii)	Daily health checks	9 (90%)	1 (10%)	10 (100%)

From Table 1 above, it is revealed that the majority of the schools under study were maintaining the following nutrition, health and safety (NHS) aspects well: well cleaned rooms, health record book, well maintained playground, availability of disinfectants, adequate water, availability of a first aid kit and making daily health checks. The observation revealed that the minority of the schools under study were not taking care of the above listed NHS aspects.

The table further reveals that half the toilets were well cleaned by the schools and the other half was not well cleaned. The table shows that the minority of the schools were giving Early Childhood Development children a balanced diet while the majority was not but that all the schools under study had a certificate of operation from the City Health. Further analysis of the certificates showed that this applied to grades one to seven and that the Early Childhood Development children were excluded. Having presented the observation checklist results, the following sub-section presents the in-depth interview responses in support of the findings above.

School heads' responses to in-depth interviews on the nutrition, health and safety status in ECD programmes

In support of the checklist findings above, data from the school heads' in-depth interviews to the question *"Do you promote nutrition, health and safety in ECD programmes, and if so, How do you do it?"*, revealed that they were making a concerted effort to promote NHS in ECD classrooms. They were doing this through orientation programmes offered to parents on NHS issues, thorough supervision of Early Childhood Development children's hygienic practices and play, ensuring that the ECD playground and equipment was maintained and

discussing nutrition, health and safety issues with Early Childhood Development children. Excerpts below illustrate these views:

> *"I ensure that the playground is kept clean and grass is cut short all the time and I ensure that the maintenance of the playground equipment is done regularly"* **(Head participant 8).**

> *"I make sure that my teachers in ECD supervise the ECD children's play and hygienic practices all the time to ensure that they do not get hurt or infected"* **(Head participant 2).**

> *"I ensure that when it is home time, there is always a teacher on duty to supervise the ECD children in the playground so that they are not fetched by strangers"* **(Head participant 10).**

> *"Being a multicultural school I talk about nutritious food to the parents during meetings within the realm of their cultural and religious understanding"* **(Head participant 3).**

> *"I have instructed and ensured that the ECD children have their tea break in the classroom so that teachers can assess whether the children have nutritious food"* **(Head participant 4).**

Furthermore, to the question, *"Are sanitary and play facilities up to standard?"*, the school heads also highlighted that some sanitary facilities were not up to the expected standard such as cleanliness of the toilets, the safety and cleanliness of the play areas, maintenance of the play equipment, among others. The responses by the school heads to the

question, *"Does your school have a certificate of operation from the City Council? And if so what kind?"* also revealed that the school had a certificate of operation from the City Health but this was not specifically for Early Childhood Development children but for grades one to seven. The excerpts below highlight these views:

> *"The play equipment is not repaired promptly because we do not always have the finances required to do that"* **(Head participant 9).**
>
> *"We have a certificate of operation for grades one to seven and non-specific for ECD children"* **(Head participant 1).**
>
> *"We were told to attach three to five year olds in our primary schools but were never told to register the programmes as per statutory Instrument 106 of 2005"* **(Head participant 2).**
>
> *"The ancillary staff is short staffed and hence the playground is not always up to standard"* **(Head participant 5).**
>
> *"I feel that the toilets are not hygienic at all since the ECD children are sharing the toilets with the infant classes"* **(Head participant 7).**

ECD teachers' responses to in-depth interviews on the nutrition, health and safety status in ECD

The ECD teachers also raised the same sentiments as the school heads by suggesting to the question, *"Do you promote nutrition, health and safety?"* that the NHS status was well promoted. The ECD teachers further noted to the question, *"How do you promote nutrition, health*

and safety?", that they inspected the playground daily before the children went to play, kept a health record book, supervised the children's play diligently, ensured that children got first aid when they got hurt, and discussed nutrition, health and safety issues with ECD children and parents. Statements below highlight these assertions:

> *"I discuss NHS issues, like playing safely and laying down safety rules, balanced diet, brushing and maintaining teeth and so on, with my ECD class"* **(ECD teacher participant 6).**

> *"I ensure a safe environment for ECD children by supervising their learning, play and play equipment all the time"* **(ECD teacher participant 1).**

> *"I enforce hygienic practices like washing hands before eating and after visiting the toilet and so on"* **(ECD teacher participant 7).**

> *"If an ECD child is hurt I take him or her to the sports director who does first aid"* **(ECD teacher participant 4).**

> *"I ensure that all repairs are done as soon as possible"* **(ECD teacher participant 3).**

The ECD teachers also expressed dissatisfaction with the way some NHS issues were addressed like the lack of child-sized sanitary facilities and play equipment, the unhygienic state of the toilets, the unavailability of the first aid kit in the ECD classroom and their lack of

training in first aid, to the question "*To what extent are the NHS issues addressed?*" Furthermore, the ECD teachers noted that the health check-up policy was not being adhered to and no follow up was being made by the authorities and the recommendations pertaining to NHS appraisals done by the Ministry of Primary and Secondary Education were not addressed. The statements below illustrate these views:

> *"No matter how much the Education Officer recommends for change in aspects like upgrading the upkeep of sanitary facilities the school head does not take action"* **(ECD teacher Participant 10).**

> *"The play equipment is not child-sized and not developmentally appropriate as the ECD children are using the grades one to three's which exposes them to hurts"* **(ECD teacher participant 1).**

> *"The ECD children hold on to the sides of the toilet seats which is a health hazard for them because sometimes the toilet seats are messed up"* **(ECD teacher participant 6).**

> *"When the ECD children get hurt, I must look for the sports director who keeps the first aid kit for sports and is trained in first aid and I am not"* ***(ECD teacher*** **participant 3).**

> *"There is also no enforcement of the ECD policy on yearly health check-up for ECD personnel and I do not think my administrator knows about this requirement"* **(ECD teacher participant 9).**

ECD parents' responses to in-depth interviews on the quality of nutrition and health and safety status in ECD

Data from in-depth interviews of ECD parents revealed a mixed opinion on the quality of nutrition, health and safety in the ECD learning environment. To the question, "*What is the quality status of nutrition, health and safety in ECD programmes?*" some parents viewed it as good while others viewed it as poor. The parents further noted that they got orientation discussions in nutrition, and that children were always monitored and the classrooms were well-ordered. Parents, however, highlighted that the toilets and the playground were not hygienic. Statements below highlight these findings:

> *"The playground has very long grass and I am afraid one day snakes will bite my child"* **(Parent participant 7).**
>
> *"We got orientation during the first days on what makes a balanced diet"* **(Parent participant 1).**
>
> *"The school gives you an account of how your child got hurt and how he was treated and I am happy about it"* **(Parent participant 4).**
>
> *"Whenever I bring or fetch my child there is always a teacher attending to ECD children and supervising them"* **(Parent participant 2).**
>
> *"The classroom is always smart and the tables and chairs are child-sized. However the toilets are very dirty and smelly"* **(Parent participant 5).**

"The play-ground is littered with broken chairs and I wonder how the ECD children manage to keep safe and not fall over the broken furniture" **(Parent participant 8).**

From the finding of the study, various observations can be made. The status of the play areas was partly good, though not as per expected standard. Adherence to the health check ups by parents was not done, and as a result, the sanitary facilities were partly well maintained. Some ECD teachers did not have the first aid kit and skills. However, it was observed that some ECD teachers made health check ups of children daily. In general, schools oriented parents towards good nutrition for their children.

Discussion of results

Results from the observation checklist generally indicate that the majority of the schools kept a detailed record of the ECD children's health and safety. The results also show that the majority of the schools cleaned the ECD classrooms well and had the necessary disinfectants. However, the minority of the schools under study did not have adequate disinfectants and did not clean their classrooms well and this compromised the quality of ECD programmes provided. Gunhu et al. (2011) argued that the inadequacy of sanitary facilities, clean water supply, classroom maintenance and disinfectants in Zimbabwean schools had an impact on the quality of ECD education and care.

It was further observed that the playgrounds were well maintained by the majority of schools while the minority neglected the ECD playgrounds and equipment. Half the schools under study maintained the ECD toilets and cleaned them well while the other half did not clean

the toilets well. Unsanitary toilets, according to UNICEF's (2000) earlier survey, contributed to poor academic performance and exposure to diseases in Zimbabwe.

The checklist further highlights that the minority of the schools offered a balanced diet while the majority did not offer a balanced diet. This could be because the schools did not have cooking facilities since these schools were never designed for the provision of meals. The lack of meals could also be because the schools did not have adequate human, financial and material resources to manage the ECD meals. However, to cover up for not offering a balanced diet, the majority of the schools in this study held health, safety and nutrition discussions with the parents and the ECD children to empower them with the knowledge of healthy foods. Govindasamy (2010), in his South African study, highlighted that imparting knowledge of adequate nutrition was critical for normal brain development, early detection and intervention strategies giving children the best chances for healthy development. Similar arguments on European studies were put forward by Gardner (2007) who stated that poor standards and lack of knowledge of health is a significant barrier to ECD children's ability to learn and become healthy productive adults. The observations made also showed that the majority of the schools did health checks of ECD children daily in the morning and this promoted the quality of ECD programmes.

The lack of a certificate of operation from the City Health, specifically for ECD children in the current study, compromised the quality of ECD programmes offered. Govindasamy (2010) argued that a certificate of operation for ECD programmes from the South African government promoted quality and that health factors included cleanliness,

environmental influences, consideration of children with special needs, nutrition, learning behaviour and the licensing of the ECD programme as stipulated by the government regulations and policies. The school heads' responses to interviews demonstrated that they were trying to promote nutrition, health and safety but the finding that showed failure in maintenance of toilets in some schools put the quality of the ECD programmes in these schools in doubt. The poor hygienic state of the toilets, maybe because there was water shortage which is a typical situation in Zimbabwe.

The findings of the present study are consistent with those by Gunhu et al. (2011) in Masvingo who doubted the quality of ECD programmes when they revealed that toilet facilities were inadequate and not well cleaned. Findings of the present study also revealed that the majority of the schools had adequate water while the minority did not have. Hyde and Kabiru (2003) argue that there is an increase in school attendance when water is available in the Tanzanian evaluation. The finding in the present study exposed that ECD children did not have child-sized facilities and did not have adequate personnel to supervise them during routine times, putting the quality of ECD programmes at risk. Studies by Gunhu et al. (2011) and Ciumwari (2010) revealed that the heads and the teachers in the Zimbabwean and Kenyan studies respectively were concerned with the non-availability of child-sized facilities and inadequate water.

Recommendations

Nutrition, health and safety in ECD programmes would be improved by:

a) Training all ECD teachers in first aid and providing a first aid

kit in all ECD classrooms;

b) Following up on toilet and playground maintenance;

c) Having specially accredited certificates of operation from the City Council for ECD children as per Statutory Instrument 106 of 2005; and

d) Establishing quality nutritious ECD feeding programmes that promote a holistic development of ECD children.

Conclusion

The article discussed the background to the study revealing that ECD is a period from zero to eight years. Following a qualitative methodology, the research used observations and interview guides as research instruments to gather data for the study. From the findings, it was concluded that nutrition, health and safety status in ECD was decent in some cases though limited in others. It was thus recommended that training of ECD teachers in first aid would improve the quality of nutrition, health and safety status in ECD.

References

Ackerman, D.J., & Barnett, W.S. (2009). *What do we know about the impact of publicly funded preschool education on the supply and quality of infant/toddler care draft.* Retrieved from http://nieer.org/publications/nieer-working-papers/nieer-working-paper-%E2%80%93-what-do-we-know-about-impact-publicly-funded.

Christie, P. (2008). *Opening the doors of learning.* Johannesburg: Heinemann.

Ciumwari, G.J. (2010). Head teachers' task in the implementation of preschool curriculum in Kenya Public Preschools. *Ife PsychologIA: An International Journal of Psychology in Africa*, *18*(1), 12–32.

Creswell, J.W. (2009). *Research design: Qualitative, quantitative and mixed-methods approaches.* London: Sage.

Denzin, N.K., & Lincoln, Y.S. (2005). *Introduction: The discipline and practice of qualitative research: The Sage handbook of qualitative research.* London: Sage.

Gardner, H.G. (2007). Office based counselling for unintentional injury prevention. *Paediatrics*, *11*(9), 202–206.

Gay, L.R., Mills, G.E. & Airasian, P.W. (2011). *Educational research: Competencies for analysis and applications.* Upper Saddle River: Pearson.

Govindasamy, S. (2010). *Teacher training as a prerequisite for quality ECD programmes in South Africa* (Unpublished MEd thesis in Teacher Education). Pretoria, University of South Africa.

Gunhu, M.R., Mugweni, M.R., & Dhlomo, T. (2011). Integrating early childhood development education into mainstream primary school education in Zimbabwe: Implications to water, sanitation and hygiene delivery. *Journal of African Studies*, *3*(7), 135–143.

Hyde, A.L. & Kabiru, M.N. (2003). *Early childhood as an important strategy to improve learning outcomes.* Grand Baie Mauritius: Association for the development of education in Africa (ADEA).

Marotz, L.R., Cross, M.Z., & Rush, J.M. (2012). *Health, safety and nutrition for the young child.* Clifton Park, NY: Cengage.

Martinez, S., Naudeu, S., & Pereira, V. (2012). *The promise of preschool in Africa: A randomized impact evaluation of ECD in rural Mozambique.* Mozambique: The World Bank & Save the Children.

McMillan, J.H., & Schumacher, S. (2010). ***Research in education:*** *Evidence based inquiry* (7th edn.). New Jersey. Pearson.

Ministry of Education, Sport, Arts and Culture, Zimbabwe. (2011). *Principal Director's Circular No. 20 of 2011.* Harare: Government Printers.

Myers, R.G. (2004). *In search of quality in programmes of Early Childhood Care and Education (ECCE).* A paper prepared for the 2005 EFA Global Monitoring Report 2005. Paris: UNESCO.

Nziramasanga, C.T. (1999). *Report of the presidential commission of inquiry into education and training.* Harare: Government Printers.

Organisation for Economic Co-Operation and Development. (2006). *Starting strong II: Early childhood education and care*. Paris: OECD Publishing.

Patton, M.Q. (2002). *Qualitative evaluation methods*. Beverly Hills: Sage.

Silverman, D. (2004). *Qualitative research, theory, methods and practice*. London: Sage.

Silverman, D. (2006). *Qualitative research theory, methods and practice* (3rd edition). London: Sage.

Statutory Instrument 106 of 2005 (Zimbabwe). Early Childhood Development Centres Regulations. Harare: Government Printers.

The Education Act of 1973 (Zimbabwe). Harare. Government Printers.

The State of the World's Children. (2001). *A guide to early childhood development programmes*. State of Connecticut, New York: UNICEF.

Thomas, C.M. & Thomas, A.M. (2009). Current issues in comparative education: Early education in Zambia, an integrated part of educational provision. *Early Childhood Education and Care: Worldwide challenges and Progresses* 11:6–14.

UNICEF. (2000). *Defining quality in education.* A paper presented by UNICEF at the meeting of The International Working Group on Education. Florence, Italy/New York: UNICEF.

UNICEF. (2006) *Evaluation of the national early childhood development programme* .Harare: Ministry of Education.

Waldfogel, J. (2006). *Early chidhood policy: A comparative perspective. Blackwell handbook of early childhood development.* Oxford: Blackwell.