## Influence of Provision of Mobility and Self-help Services on Academic Performance of Learners with Physical Disabilities in Kiambu County

Njeri P. Ndung'u<sup>1</sup>, Dr. Fransiscah I. Wamocho<sup>2</sup>, Dr. Nelly W. Otube<sup>3</sup>

<sup>1</sup>Master's Department of Special Needs Education, Kenyatta University, Nairobi, Kenya <sup>2,3</sup> Lecturer, Department of Special Needs Education, Kenyatta University, Nairobi, Kenya

Abstract: The aim of this study was find out how provision of mobility and self- help skills influence academic performance of learners with physical disabilities in Kiambu County. The study adopted survey research design, employing survey method to achieve the objectives. The study was guided by Social Cognitive Theory which shows that human functioning controls a central role of cognitive vicarious, self-regulatory and self-reflective processes in human adaptation and change. The study targeted 120 learners with physical disabilities, 400 teachers and 12 professionals such as social workers, counselors, nurses and occupational therapists. Purposive sampling was used to select four professionals and stratified random sampling technique was used to select thirty six learners and one hundred and twenty teachers. Questionnaires and interview guides were used to collect information. The quantitative data was sorted, coded and keyed into Statistical Package for Social Sciences (SPSS) software and presented using descriptive statistics where tables of frequencies and percentages were used. The findings revealed that support services helped the learners to participate in class, socialize with others and improved the performance of the learners. The conclusion of the study was that support services helped the learners to participate and socialize hence improved performance of learners. The study recommended that school management of learners with physical disabilities should be keen in provision of adequate self-help skills to learners by employing an occupational therapist.

Keywords: Mobility Services, Self-help Services, Academic Performance, Learners with Physical Disabilities

## I. INTRODUCTION

As per World Health Organization (2015), disability is a limitation or inability to execute an activity in a manner that it is within the range deliberated as normal for humans. Globally, it is estimated that the number of children with disabilities is about 7-10% of the total child population. Physical disabilities are impairment that interfere with an individuals' mobility, communication, coordination, learning and individual adjustment that cover a wide range of conditions from a mild degree of clumsiness, to the child using a wheelchair who actually require support in his/her daily living (Barbotte & Chau, 2011). This is due to the reason that physical impairment affects one's ability to move about, to use arms and legs effectively, to swallow food and or breathe without depending on the caregiver.

In America, According to Szaba, (cited in Heward, 2006), Individual with Disability Education Act (I.D.E.A) ensures that children with disabilities receive necessary education and services without the cost to the child and the family. Free Appropriate Primary Education (F.A.P.E) is one of the provisions in the (I.D.E.A) and stipulates that special education and support services such as mobility, counseling, medical, self-help skills and multidisciplinary are provided at public expense. According to Chung, Evans, Lee, Rabbani and Roxborough (2008), children with physical disabilities such as cerebral palsy show difficulty in performing daily activities related to movement and positioning in their body. Kling, Campbell and Wilcox (2010) also opine that hardship often faced by children with physical disabilities include bathing, wearing clothes, leaving for school on their own, changing clothes, playing, gathering with family, physical activity and recreation.

Kenya holds the principle of 'best interest', which states that all resolutions disturbing the youngster will be made in the attention of the youngster (G.O.K, the children Act 2001). The introduction of FPE in 2003 opened door for millions of Kenyan children including those with special needs MOEST (2003). In the past, children with special needs such as physical disabilities used to be segregated and educated only in residential special schools. The government provides funds and ensures that all children are in school. Although the government is committed to providing special education, the effective delivery of support services such as mobility, medical, counseling, self-help skills and multidisciplinary services to learners with physical disabilities which can influence their academic performance has not received adequate attention hence the focus of the present study. This study therefore focused on influence of provision of educational support services on academic performance of learners with physical disabilities in Thika East sub-county, Kiambu County, Kenya.

## 1.1 General Objective

The general objective of this study was therefore to analyze special needs education support services on academic performance of learners with physical disabilities in Kiambu County, Kenya.

## 1.2 Specific Objective of the Study

Specifically the study sought to find out how provision of mobility and self-help services influence academic performance of learners with physical disabilities in Kiambu county.

#### II. LITERATURE REVIEW

#### 2.1 Theoretical Review

The study was guided by Bandura's social cognitive theory advanced in 1986. This theory stated that human functioning controlled a central role of cognitive vicarious, self-regulatory and self-reflective processes in human adaptation and change. According to this theory, one expected the provision of special need support services to children with physical disabilities to rotate around personal factors such as self-esteem, behavioural such as withdrawal and surrounding factors such as mobility, physical structures and manipulation of learning materials. This meant that the academic and social wellbeing of these learners cannot adequately be provided by teachers alone without involving other experts (Wachianga 2010). Using social cognitive theory as a framework, teachers and professionals could improve their learner's emotional behaviors and correct their family self- habits and thinking to improve their academic and self-regulatory practices by working as team. To achieve this, the teacher will apply the Bandura's collective agency, by working with the counselor, therapist and medics to enhance academic performance and socialization of learners with physical disabilities.

## 2.2 Empirical Studies and Knowledge Gaps

According to Wachianga (2010), the ability to explore and interact with the environment is critical and any inability to do so affects the individual psychologically. The damage of aptitude to transfer about easily and securely may be the highest removal touched by pupils with corporal disabilities. Providing a means of flexibility to these learners can recover their impartiality, investigation, interaction with the world and may result in enhancing learning opportunities. As stated by Farrel, (2009) motor activity and physical access perhaps most represents the potential to remove barriers. PVC pipe walker, manual or powered wheel chairs or toys can be used as mobility aids. Otherwise wheel chair access ramps and continuous areas of smooth floor surfaces can assist in accessing classrooms and other facilities. Mobility services are those services provided by physiotherapist who are trained professionally to evaluate gross motor functioning and selfhelp skills, living skills and job related skills necessary for the achievement of student. They may provide direct services or consultant services as cited by Schwartz, (2005).

Oketch (2003) revealed that self -help services allow somebody with special needs to be recognized and to contribute in all actions of the public. Mwaura and Wanyera (2002) points out that there is an excessive risk of starting undesirable self-concept as a consequence of responses from nobles. Wachianga (2010) revealed that self-help services allowed a learner with physical disabilities to socialize and participate in academic. These studies have shown the importance of self-help skills to children who are physically disabled and how they enhance in academic participation and socialization. However, they did not focus on whether is one of special need support services offered to learners with physical disabilities. This is what the current study seeks to establish, if self-help skills services was one of special need educational support services offered and impact on academic performance of learners with physical disabilities.

According to Dane and Donavan (2002) eating or assisting in eating may take a long time and patience is needed. Meal times can provide the best opportunity for learning because eating is highly motivating and engaging as the child friendly interacts. This study wished to ascertain whether feeding is one of the self-help skill offered and influence academic performance of learners with physical disabilities. Learners with physical disabilities which might bar them from learning as others. The study sought to ascertain whether toileting skills as a part of self-help skills impact academic performance of learners with physical disabilities.

Clothing for children with physical disabilities should allow independence in dressing and more self-sufficiency. According to Sherwood, Best and June (2009) some students with motor impairments are able to dress themselves, but adults do not allow enough time for them to complete the tasks. Some students are never given the opportunity to learn that they can complete some tasks without aid. This causes unnecessary dependence. Individuals with coordination problems and limited use of hands may need assistive devices to increase success. The current study sought to establish whether the skill of dressing as self-help is one of special needs educational support services offered to learners with physical disabilities and influence on their academic performance.

## 2.3 Conceptual Framework

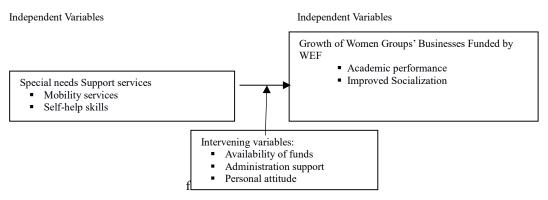


Figure 1: Conceptual Framework

#### III. METHODOLOGY

## 3.1 Research Design and Target Population

Descriptive survey design was used in this study to investigate the influence of special needs educational support services on academic performance of pupils with physical disability in Thika East sub-county. Descriptive survey designs are used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of classification (Orodho, 2009). The study targeted 120 learners with physical disabilities, 400 teachers and 12 professionals in Thika East sub-county that is in Githima zone. These schools were chosen because they had integrated learners with physical disabilities.

## 3.2 Sampling techniques and Sample Size

Purposive sampling technique was used to select 12 schools from Kiambu County, 4 professionals from Kiambu County, Stratified random sampling technique was used whereby certain sub-groups were included to select 36 learners so as to include certain categories such as gender that is boys and girls, classes 5-7 and type of physical disability, and teachers based on the classes they teach that is, 40 from class 5, 40 from class 6 and 40 from class 7 leading to total sample of 160 respondents comprised of 120 teachers, 36 learners and 4 professionals.

#### 3.3 Research Instruments

The researcher used a questionnaire as a research instrument for 120 teachers and 36 learners and interview guide for 4 professionals that is a social-worker, a nurse, an occupational therapist and a counselor.

## 3.4 Pilot Study

The pilot study was conducted in Ndula primary which had integrated learners with physical disabilities. Piloting involved 3 teachers and 3 pupils from class 5-7. The respondents were given the questionnaires and were given instructions on how to fill. Piloting was done to check the validity and reliability of research instruments. The tools were assessed for content validity that is the range to which the form insides such as use

of correct language, verdict structures and whether requests are to the equal of the envisioned respondent. The researcher used certified tools to discourse the aims of the study. Reliability was established using test-retest method and a correlation coefficient of 0.75 was used to establish reliability.

## 3.5 Data collection Procedures, Analysis and Presentation

Before data collection, the Kiambu county director of education and Thika east sub-county education officer was visited to brief them about the study. Logistic procedures were followed downwards to the schools. Prior appointment was made to visit the respective schools at a time convenient for them. Ouestionnaires were self-administered to respondents and later interview sessions for social workers were arranged on the agreed date convenient to her. The collected data were analyzed and presented using descriptive statistics on the basis of frequencies and percentages. Graph, pie charts and tables of frequencies and percentages were used to present and analyze the data. Qualitative data were sorted out, classified and categorized under major themes of support services as mobility, medical, counseling, self- help services, multidisciplinary service and professional challenges.

#### IV. RESULTS AND DISCUSSIONS

#### 4.1 Bio-Data of the Respondents

Table 1: Gender and the class of the pupils

Class	Boys		Girls		Total	
	F	%	F	%	F	%
Five	4	20	3	18.75	7	29
Six	6	30	5	31.25	11	31
Seven	10	50	8	50	18	50
Total	20	55.56	16	44.44	36	100

There were 20 boys and 16 girls adding up to 36 pupils. The findings implied that most of the learners in upper primary in Thika East were boys. The higher proportion of those in class seven was informed by the fact that they would provide more reliable information compared to their juniors.

Table 2 Teachers' professional qualification

Qualification	Frequency	Percentage
P1	38	31.3
Diploma in SNE	60	50
Bachelor	20	17
Masters	2	1.7
Total	120	100

Findings indicated that the learners with physical disabilities were handled by qualified teachers who had knowledge in special needs and gave relevant information to the researcher. Teachers were further asked to indicate their teaching experience as indicated in Figure 1.

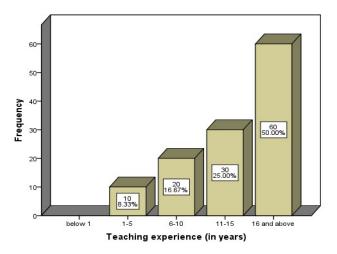


Figure 1: Teachers' Teaching Experience

Findings in Figure 1 showed that most of the respondents had adequate experience to understand various aspects affecting learners with physical disabilities. This assisted the researcher in receiving adequate information on the impact of provision of support services on academic performance of learners with physical disabilities.

# 4.2 Provision of mobility and self-help services and influence on academic performance of learners with physical disabilities.

To meet this objective, the study sought to establish whether mobility services which enabled the learner to explore and interact with the environment are provided daily during school terms and the results were presented in the following subsections:

## 4.2.1 Provision of Mobility Services

Table 3: Frequency of Provision of Mobility Services

Response	Frequency	Percentage %	
Agree	8	22.2	
Disagree	28	77.8	
Total	36	100	

From the table, findings revealed that mobility services were not provided daily. The Therapist from the interview guide said that," we provide the mobility services weekly". Mobility services should be provided daily for they are very important to learners with physical disabilities. According to Schwartz (2005) mobility services should be provided to learners with physical disability often as they had motor difficulties which made it difficult for them to move or manipulate the physical environment.

#### 4.2.2 Type of mobility devices

The study further sought to establish the type of mobility devices used by learners with physical disability and the results were as displayed in figure 2.

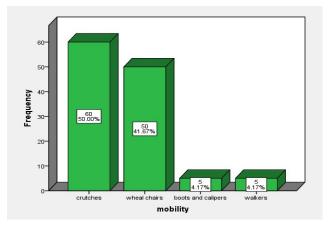


Figure 2: Mobility devices used by learners

From the results in figure 4.2, 60 (50%) teachers said that learners with physical disability used crutches, 50(41.67%) teachers said that learners used wheel chairs, while 5(4.17%) teachers said that the learners used boots and calipers and walkers. The results concurred with Gagiulo (2000) who found that learners with physical disabilities used wide range of mobility devices.

## 4.2.3 Mobility Services and Academic Performance

The study also sought to establish whether mobility services improved academic performance and the results were as shown in table 4.

Table 4: Mobility Services Provided and Academic Performance

Responses	Frequency	Percentage %	
Teachers	120	100	
Professionals	4	100	
Learners	36	100	

Findings in Table 4 showed that all 120(100%) teachers and 36(100%) learners responded that the mobility services improved academic performance. Teachers observed that learners attended classes in time and participated actively in class due to improved mobility. The occupational therapist also indicated that mobility services improved academic performance. The finding concurred with Waruguru and

Kabuchuru (2008 who observed that to teach learners with physical disabilities, it was important to train the learners to use mobility devices. According to this, the device would accelerate the speed of learners' movement hence improve the participation in class activities. Also the learners became more active after exercises which improved their academic participation hence improved performance.

#### 4.2.4 Teaching Self Help Skills

From the first objective the study also sought to establish whether teaching of self-help skills as another support service was provided to learners with physical disabilities. Teachers were asked to respond with either yes or no. The following responses were presented in figure 3.

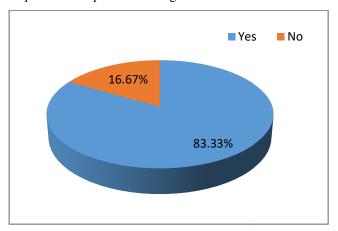


Fig 4.3 Teaching of self-help skills

According to the results in figure 4.3, 100(83.33%) teachers responded that self-help skills were taught to learners with physical disabilities while 20(16.67%) responded that it was not taught. The findings showed that majority of the teachers indicated that teaching self-help skills to learners with physical disabilities was done. Other learners without physical disabilities were not generally taught how to perform such activities as toileting, dressing and bathing. They acquired them through imitation and observation and they became part and parcel of their lives. They therefore learnt them naturally, incidentally or effortlessly. However, learners with physical disabilities had difficulties acquiring these skills.

#### 4.2.5 Self-helps skills and Academic Performance

The study sought to establish whether the self- helps skills promoted academic performance of learners with disabilities.

Table 5: Self-help skills and Academic Performance

Impact	Frequency	Percentages
Reduces infection of diseases	100	83.3
Build self esteem	80	66.7
Promotes confidence	60	50
Creates conducive learning environment	100	83.3
Increases class attendance	80	66.7

The data on Table 5 above shows that 100(83.3%) teachers showed that self- help skills help to reduce infections of diseases and creates conducive learning environment, 80(66.7%) teachers felt it built self -esteem and increases class attendance while 60(50%) teachers indicated that it promoted confidence. The results shows that self-help skills had influence on academic performance as they build selfesteem, reduces infections, increases class attendance and creates conducive learning environment, therefore, increasing class participation. Oketch (2003) revealed that self-help services allowed somebody with special needs to be recognized and partake in all actions of the society. The finding of this study differs with Bigge et al., (2005) who emphasized importance of teaching personal management skills to promote independence in school. This did not reflect on academic performance of the learner as a result of personal management skills.

#### V. CONCLUSIONS

Based on the findings it is logical to conclude that special needs education support services impacted academic performance of learners with physical disabilities positively for it was noted that provision of education support services was of great help to learners with physical disabilities in academic performance and socialization. The mobility skills enabled the learners move, play with peers and manipulate materials. Medical skills helped the learners to be healthy and be able to participate in learning process though it was provided when learners visited the health facility available. The only health measures provided in school was first aid, health issues and proper dose.

#### VI. RECOMMENDATIONS

- 1. The study recommended that provision of educational support services should be emphasized and be provided to learners with physical disabilities in schools.
- 2. The government should employ more professionals such as nurses, counselors, social workers and therapists in schools to provide the services to learners for they would be very important to learners with physical disabilities.
- The ministry should provide the schools with funds to buy materials and equipment for learners with physical disabilities and parents should be sensitized and made aware of their learners needs to assist them to be cooperative.

## REFERENCES

- [1] Bandura, A. (1986) Social foundations of thoughts and action; a social cognitive theory. Englewood cliffs, N.J.:Prentice Hall.
- [2] Barbotte, E.G. and Chau. F, (2011). Prevalence of Impairments, Disabilities, Handicaps and Quality of Life in the General Population: A Review of Recent Literature. *Bulletin of the World Health Organization*, 79 (11), p. 1047.
- [3] Behrman, R.E. and Kliegman, R.M. (2002) (4<sup>th</sup>ed.) Nelson essentials of pediatrics Philadelphia PA: WB Saunders.
- [4] Bigge J. L.Heller , K.W & Best J.S (2005) Teaching Individual with Physical disabilities London. Green Wood press.

- [5] Chung, J., Evans, J., Lee, C., Lee, J., Rabbani, Y. and Roxborough, L. (2008). Effectiveness of adaptive seating on sitting posture and postural control in children with cerebral palsy. *Pediatric Physical Therapy*, 20, pp. 303–317. http://dx.doi.org/10.1097/PEP.0b013e31818b7bdd.
- [6] Dane, A. and O. Danovan (2002). Good practice in caring for Young Children.
- [7] Gargiulo R.M (2009). Special Education in Contemporary Society. An Introduction to Exceptionality Sage, London.
- [8] Gok (2001). The Children's Act. Nairobi: Government Printer.
- [9] Heward W.L. (2006). Exceptional Children . An Introduction to Special Education 8<sup>th</sup> Edition New Jersey prentice Hall.
- [10] Kling, A., Campbell, P.A. and Wilcox, J. (2010). Young Children With Physical Disabilities Caregiver Perspectives About Assistive Technology. Infant & Young Children. Wolters Kluwer Health. Lippincott Williams & Wilkins, 23(3), pp. 169–183.
- [11] MOEST (2003). A report of the task force on special need Education. Teacher's handbook. Nairobi.

- [12] Mwaura, M. & Wanyera, S. (2002). Introduction to Children with special needs in education. Unpublished: KISE.
- [13] Oketch, M.T. (2003). Elements of Education and social Nairobi; Masola Printers.
- [14] Orodho, J.A. (2009). Element of Education and social science Research Methods Harlifax: printers NRB.
- [15] Sherwood J., Best, K.W. & June, L. (2009) 5<sup>TH</sup> Ed. Teaching Individuals with Physical or Multiple Disabilities Upper Saddle River, NJ: Pearson Merrill.
- [16] Wachianga.J.O.W. (2010). An Investigation into the provision of support services for Learners with physical disabilities in the two selected school in Kisumu East District, Kenya unpublished MED Thesis K.U.
- [17] Waruguru, M.N. & Kabuchuru, C. (2008).Introduction to inclusive Education. *Unpublished*: K.I.S.E.
- [18] WHO. (2015). Health Education. [online] Available at: http://www.who.int/topics/health\_education/en/ (Accessed: April 27, 2017).