ABSTRACT

Learners with Visual Impairment perform poorly in mathematics as compared to other subjects in Kenya Certificate of Primary Education (KCPE) examinations in special primary schools in Kenya. Mathematics is a prerequisite to many careers and due to its importance; mathematics has been made compulsory and an examinable subject in primary and secondary schools in Kenya. The purpose of the study was to investigate factors influencing performance in mathematics among learners with visual impairment in examinations in special primary schools of two selected Counties. The objectives of the study were to determine learner based factors influencing mathematics performance in examinations among learners with visual impairment; to investigate teacher based factors influencing mathematics performance in examinations among learners with visual impairment and to establish school based factors hindering mathematics performance in examinations among learners with visual impairment. The study targeted a population of 22 teachers teaching mathematics, 2 head teachers and 147 learners drawn from two special primary schools for learners with VI in Siaya and Kisumu counties. These two schools were the only special primary schools for V.I situated in the two counties. In this study, mixed methods approach utilizing a questionnaire and an interview schedule was adopted as data collection tools for the study. A purposive and saturated sampling technique was used to select headteachers and mathematics teachers respectively while stratified random sampling technique was used to select 16 learners who participated in the study. Classes 5, 6, 7 and 8 formed the first strata while the second stratum was based on gender that is boys and girls. A simple random sampling technique was conducted on the gender strata. Quantitative data for the study was collected using a self-administered questionnaire for the teachers and analyzed differently using statistical tools such as Spearman Rank Order Correlation and Multi-regression analysis with the aid of Statistical Package for Social Sciences (SPSS) version 20. Qualitative data was collected using interview schedule for the headteachers and learners and data was then analyzed using thematic analysis. Validity of the questionnaire was ensured by expert judgment by supervisors, while reliability was ensured by the split-half method and a reliability coefficient of 0.868 was reported. The findings of the study were that, there was a significant positive correlation that was established between school factors, teacher factors and mathematics performance but not between learner factors and mathematics performance. The study also established that specialist curriculum for the V.I in the area of literary and Nemeth Braille codes were not receiving due recognition. The study recommended that the Ministry of Education in Kenya through recommendations by the teachers of mathematics should seriously revisit the policy issues of using mathematics as a prerequisite for transition to the next academic level as far as learners with visual impairment are concerned. The Ministry of education should employ a resource person in the sub-county to be in charge of schools for learners with visual impairments. The Kenya National Examination Council ought to set pace in the promotion of teaching of mathematics to learners with V.I by revising time allocated for mathematical evaluation for persons with V.I.