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## RESEARCH ARTICLE

# THE EFFECT OF PARENTAL SOCIOECONOMIC STATUS ON PARTICIPATION OF PUPILS IN SPECIAL UNITS IN PUBLIC PRIMARY SCHOOLS IN KAKAMEGA COUNTY

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**ABSTRACT**

The government of Kenya recognizes the importance of special needs education as a crucial subsector for accelerating the attainment of Education for All (EFA) and the Sustainable Development Goals (SDG). This study sought to establish the effect of parental socioeconomic status on participation of pupils in special units in public primary schools in Kakamega County, Kenya through a descriptive research survey design. A sample of 226 was selected using multi-stage sampling technique. Data was collected using a questionnaire and document analysis. A pilot study was conducted in three special units and the data was used to assess the reliability of research instruments using split-half technique which was r=0.8. Face and content validity were used to validate the instruments. Data was analysed descriptively and inferentially at 0.05 level of significance on a two-tailed test. The multiple regression results show that pupil's participation in special units is not affected by student wealth index tertiles. Besides repetition, number of girls with special needs in a household, lower pupils' participation in special units in public primary schools in Kakamega County. It is therefore recommended that the government policy on integration of special units in public primary schools be enhanced to widen access in special units.



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## INTRODUCTION

Children with disabilities and their families constantly experience barriers to the enjoyment of their basic human rights and to their inclusion in society. Their abilities are overlooked, their capacities are underestimated and their needs are given low priority. Yet, the barriers they face are more frequent as a result of the environment in which they live than as a result of their impairment (UNICEF, 2007). Attention to the downtrodden conditions of people with disabilities resulted in reforms in Europe including the re-evaluation of special schools. In the United States reform came more slowly. Throughout the mid half of the 20th century, special schools, termed institutions, were not only accepted, but encouraged (Turnbull, Beegle, & Stowe, 2007). Students with disabilities were housed with people with mental illnesses, and they were not educated much, if at all (McCuen, 1997). With the Amendments to the Individuals with Disabilities Education Act (IDEA) of 1997, school districts in the United States began to slowly integrate students with moderate and severe special needs into regular school systems (Jorgensen, 1998). According to the Department of Education, approximately 6 million children (roughly 10 percent of all school-aged children) currently receive some type of special education services in the United States (Priscilla, 2002). Although not all children with disabilities are covered by the IDEA and Education for All Handicapped Children Act of 1975, (EHA), these two acts have been instrumental in ensuring a free public education to millions of children with disabilities each year since passage. Disabled children have a right to education which is enshrined in both the UN Convention on the Rights of the Child (UNCRC) and the UN Convention on the Rights of Persons with Disabilities (UNCRPD). These conventions have been widely signed and ratified in Africa as well as in the UK (UNICEF, 2011). The United Nations Children's Fund (UNICEF, 2013) estimates that between 5% and 10% of all children in Africa are children with disabilities; children with disabilities are particularly vulnerable and influenced by the extent of their impairment as well as by the sex of the child. Research focusing on children with disabilities in developing countries suggests that 90% of these children do not attend school and are thus less likely to engage in other opportunities for social participation (Global Partnership for Children, 2012).

In Africa, African governments and NGOs have taken steps to address the disability problem. In 1988, the African Rehabilitation Institute (ARI) was established in Harare (African Studies Centre, Leiden, 2014). This Specialized

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Agency of the AU reports to the political organs of the AU on disability issues and coordinates all matters relating to disability in Africa (ibid). After the World Conference on Education for All (EFA), held in Jomtein, Thailand, in 1990, many countries embraced universal education for all (UNESCO, 1996). Kenya was not left behind. This was evident from the various products by the government such as the Koech Report (1999), referred to as "The Totally Integrated Quality Education and Training"(TIQET), which emphasized on ways and means of improving access, equity, relevance and quality with special attention to gender sensitivity, groups with disabilities and other disadvantaged groups; the Children's Bill of Rights (2001) which included education as a right to every child regardless of any kind of distinction; the Persons with Disability Act (2003) which stated that, "No person or learning institution should deny admission to a person with disability to any course of study by reason only of such disability; if the person has the ability to acquire substantial learning in that course, learning institutions should take into account the special needs of persons with disabilities with respect to entry requirements, pass marks, curriculum, examinations, use of school facilities, class schedules, physical education requirements and other similar considerations.

Socioeconomic status is a definite background variable that represents a feature of the social structure in society (Oakes & Rossi, 2003). Social economic status is commonly conceptualized as the social standing or class of an individual or group, political power, educational background and occupational status. In support, Saifi and Mehmood (2011), articulate socioeconomic status as measured as a combination of education, income and occupation. According to UNICEF report, (2013) social-economic status affects overall human functioning including our physical and mental health. Special needs children from different social economic statuses are likely to have different opportunities when it comes to education matters, for instance pupils from poverty driven areas or from poor families may not be integrated in public schools due to lack of basic resources that they need from their day to day learning as compared to their well to do counterparts. Due to low socio economic status, parents with special needs children can only afford to send them to school depending on their social economic status. Where the well to do families will happily send them to school while the poor ones are forced to either educate the child at home or leave them there while they go out to work (Casanova, Garcialinares, Torre & Carpio 2005). Although children with disability may be found in any family, poverty and disability are strongly interlinked: poverty may increase the likelihood of disability and may also be a consequence of disability (WHO, 2012; Barron, 2000). As a consequence children with special needs from poverty driven areas or from poor families may not be integrated in public schools which actually shows by their low enrolment. Further, Hill, Castellino, Lansford, Nowlin, Dodge, Bates, and Pettit, (2004), also argue that socio–economic status of parents do not only affect the academic performance, but also makes it possible for children from low background to fairly compete with their counterparts from high socio economic background under the same academic environment.

Participation in activities is the context in which children form friendships, develop skills and competencies, express creativity, achieve mental and physical health, and determine meaning and purpose in life (Law & King, 2000). Participation enables children to understand the expectations of society and gain the physical and social skills needed to function and flourish in their homes and communities. Children with disabilities are clearly at risk for lower participation in day-to-day activities (Children's Bill of Rights, 2001). Research shows that children with special needs, who receive related services (special education, speech/language therapy, occupational therapy, etc), benefit more when those services are provided in the natural environment with their peers (Allen & Cowdery, 2005). This interaction not only benefits the child with special needs, but also helps children without special needs learn about tolerance and acceptance of others. The essence of Free Primary Education by the Government of Kenya was to increase equity in access, participation, retention, completion and transition of primary education to all children in Kenya including those with any kind of special needs. It is against this backdrop that this study sought to establish the effect of parental socio-economic status on participation of pupils in special units in public primary schools in Kakamega County.

## MATERIALS AND METHODS

### Research Design

The study utilized a descriptive survey research design. Lokesh (1984) observes that survey studies are designed to obtain persistent and precise information concerning the current state of phenomena and whenever possible to draw varied general conclusions from the facts discovered. Besides, Orodho, (2004) and Kombo and Tromp,(2006) explain that descriptive survey designs are used in preliminary and exploratory studies to allow the researchers to gather information, summarize, present and interpret data for the purpose of clarification. Descriptive survey design was relevant because this study investigated the effect of parental socio-economic status on participation of pupils in special units in public primary schools. Furthermore, descriptive survey research design was chosen because it involves collecting data in order to test the hypotheses or answering questions concerning the current status of the subjects of the study. The design was found suitable for the study because of its ability to elicit a wide range of baseline information about participation of pupils in special units in Public primary Schools in Kakamega County.

### Sampling Techniques and Sample Size

The public and day primary schools with special units in each sub county were purposively selected from the pre-existing stratus of: - visually impaired (VI), physically handicapped (PH) and hearing impaired (HI). Simple random sampling using lottery method was used to select 30% of special unit in each category per sub-county giving a total of 24special units. Besides 30% of the pupils of the year 2015 were selected by virtue of having been in the school system for more than four years to participate in the study. Therefore a total of two hundred and twenty six (226) respondents formed the study sample (202 pupils in special units; 78 VI,53 PH and 71 HI; and 24 teachers (10, 8 & 6 in VI, PH &HI units respectively) in charge of the twenty four special units participated in the study. The sample size of pupils that was used in this study was a representative sample of 30% of the pupils in special units. This was in line with Borg and Gall, (2003) assertion that in most surveys or experiments, at least 30% of the total population is representative.

### Instrumentation

Questionnaires and document analysis schedule were used to collect data. Validity (face and content validity) and reliability of instruments were established using data collected from piloting and expert review of the instruments. A computed Cronbach's Coefficient of 0.871 and 0.855for the pupils and teachers questionnaire respectively was obtained: an indicator that the instruments were of high reliability (Kathuri & Pals, 1993).

### Data Analysis

Descriptive statistics in form of percentages and means were used to describe the study population while inferential statistics were used to make deductions and generalizations about the whole population. Data was analysed objectively and presented in form of tables. According to Mugenda and Mugenda (1999), the purpose of descriptive statistics is to enable the researcher to meaningfully describe a distribution of scores or measurement using a few indices or statistic. Thematic reporting of data from teacher open ended questionnaire was also included. For multiple linear regression, the outcome variable was measured on an interval scale while the predictor variable was measured on an ordinal scale. Pearson Correlation analysis was conducted to assess how significantly correlated the variables were at $\alpha$=.05.

## RESULTS AND DISCUSSION

One data set was generated from the pupil's questionnaire. The unit of analysis (pupil's participation) was school level. Thus means of the pupil participation (days present) was computed. The dependent variable (p53: pupils school presence days) was an average of the pupils school presence in a school calendar for the years 2015-2016 (four terms) measured at interval level. In 2015 school calendar, term 1 and term 2 had 14 weeks while term 3 had 12 weeks. In the 2016 school calendar, term 1 had 14 weeks. For the four terms under study, the pupils with special units were to attend a total of 54 weeks of schooling translating to 270 days. Table 1 presents descriptive statistics of the variables used in the analysis of data measured at interval or nominal scales. It can be discerned from Table 1 that the mean for the outcome variable was 230.67 for the days present with the highest at 268 and lowest at 158 with the distribution's standard deviation at 16.92. This indicates that out of the maximum 270 days for schooling for the four terms, pupils with special needs attended an average of 231 days (88.85%). This implies that the rate of school attendance for pupils with special needs was above average with 11.15% of non-attendance for the four school terms. This clearly suggests that there are factors which hinder pupils with special needs participation in special units. The data also show that enrolment in the special units averaged 18, and that most of the units had a lunch programme. These variables have been shown to affect pupils' participation in special units. The preliminary results further showed that pupil's enrolment in the special units was well distributed across the social economic tertiles. The results also indicate that most of the respondents had both parents alive and were living in their homes. The data further indicate that the respondents had challenged siblings of school going age most of who were not enrolled in school. This may suggest that the number of challenged siblings in a house hold negatively affect pupil's participation in special units. The preliminary results also indicate that the respondents felt that their parents are concerned and supportive in their participation in special units but had challenges in providing respondents with school needs while their siblings had little support in their academic discourse. These aspects may hinder respondent's participation in special units in public primary schools in Kakamega County. This study models this variable using multiple linear regression to establish their effect on pupils participation in special units. The results are presented in sections below.

### The Effect of Parental Socioeconomic Status on Participation of Pupils in Special Units in Public Primary Schools in Kakamega County

The purpose of this study was to establish the effect of parental socioeconomic status on participation of pupils in special units in public primary schools in Kakamega County. The null hypothesis tested was that parental socioeconomic status has no statistically significant effect on participation of pupils in special units in public primary schools in Kakamega County using Multiple Linear Regression Analysis (MLRA). Results of a pair-wise correlation to establish association between variables are reported in Table 2. The results of the pair wise correlation showed that the variables the outcome variable; student's wealth index (swi3); students grade (p13); Student has repeated class 2(p182); Student's school has lunch programme (p112); Some of the respondent's friends attend class regularly (p11421); Some of the respondent's friends work hard in their academic work (p11421); All of the respondent's friends work hard in their academic work (p11432); Sometimes parent/ guardian provides school needs (p442); Always parent/ guardian provides school needs (p443); Parent/ guardian buys extra books (p49); Agree: Parents/ guardians interested in parents' groups (p41032); Strongly agree: Motivated by parents to perform well (p41051) and Disagree: Motivated by parents to perform well (p41054) were correlated with the outcome variable at alpha = 0.05. These variables were included in the regression model to predict pupils' participation in special units.

Secondly, the researcher ran a model diagnostic to establish whether the regression model included all the variables and excluded irrelevant variables using scatter plot. The results ($F(3, 169) = 0.78$; $p = 0.5077$) indicate that the model has no omitted variables. Besides, the results of the link test ($p$=0.8618) for hatsq also showed that the regression model was correctly specified. Further, the results of multicollinearity using variance inflation factor (VIF) test showed that no variable in the regression model had a VIF>10 suggesting that the regression model did not experience collinearity problems (Stock & Watson, 2003).

### Multiple Regression Models on the Effect of Parental Socio-Economic Status on Participation (Attendance) in Special Units in Public Primary Schools

The regression model had three models to measure the effect of parental socio-economic status on school attendance (mean number of days present) in special units in public primary schools in Kakamega County. In model 1, this study assessed the effect of parental SES on the mean number of days present for the four terms for the years 2015-2016 while controlling for pupils factors. In model 2 the researcher assessed the effect of parental SES on the mean number of days present for the four terms for the years 2015-2016 while controlling for pupil's factors and home environment.

**Table 1. Descriptive Statistics for Variables Used in the Analysis of the Data**

| Variable | Variable label | Mean | se(mean) | Std.Dev | Min | Max |
|---|---|---|---|---|---|---|
| p53 | Student's school presence days, 2015-2016 (4 terms) | 230.7 | 1.24 | 16.92 | 158 | 268 |
| p13 | Student's grade | 6.17 | 0.08 | 1.1 | 5 | 8 |
| p113 | Student's class enrolment | 18.49 | 0.91 | 12.41 | 2 | 72 |
| p341 | Number of sibling boys | 2.32 | 0.11 | 1.5 | 0 | 7 |
| p342 | Number of sibling girls | 2.51 | 0.12 | 1.71 | 0 | 11 |
| p35a | Number of siblings with disabilities | 0.21 | 0.04 | 0.48 | 0 | 2 |
| p37 | Student's birth position | 2.68 | 0.14 | 1.88 | 1 | 11 |
| swi3 | Student's wealth tertiles (3): 1=High SES, 64 (34.22); 2=Middle SES, 61 (32.62); 3=Low SES, 62 (33.16) | | | | | |
| p182 | Student has repeated C2: 0=Not repeated C2, 155 (82.89); 1=Yes repeated, C2 32 (17.11) | | | | | |
| p112 | Student's school has lunch programme: 0=No, 76 (40.64); 1=Yes, 111 (59.36) | | | | | |
| p11421 | Some of the respondent's friends attend class regularly: 0=Otherwise, 115 (61.50); 1=Yes, 72 (38.50) | | | | | |
| p11432 | Some of the respondent's friends work hard in their academic work: 0=Otherwise, 81 (43.32); 1=Yes, 106 (56.68) | | | | | |
| p11434 | All of the respondent's friends work hard in their academic work: 0=Otherwise, 169 (90.37): 1=Yes 18 (9.63) | | | | | |
| p311 | Student has both parents alive: 0=Otherwise 74 (39.57); 1=Yes, 113 (60.43) | | | | | |
| p312 | Student has single parent: 0=Otherwise 156 (83.42), 1=Yes, 31 (16.58) | | | | | |
| p313 | Student has one parent dead: 0=Otherwise 158 (84.49); 1=Yes, 29 (15.51) | | | | | |
| p32 | Student lives in parent's/ guardian's home: 0=In an orphanage, 4 (2.14); 1=Yes, 183 (97.86) | | | | | |
| p35b2 | Respondent's challenged siblings are of school going age: 0=Otherwise, 156 (83.42); 1=Yes, 31 (16.58) | | | | | |
| p35c2 | Student's challenged siblings are enrolled in school: 0=Otherwise 166 (88.77), 1=Yes 21, (11.23) | | | | | |
| p361 | Student's sibling is visually challenged: 0=Otherwise, 176 (94.12); 1=Yes, 11 (5.88) | | | | | |
| p362 | Student's sibling is physically challenged 0=Otherwise, 182 (97.33); 1=Yes, 5 (2.67) | | | | | |
| p363 | Student's sibling is hearing challenged: 0=Otherwise, 171 (91.44); 1=Yes 16 (8.56) | | | | | |
| p442 | Sometimes parent/ guardian provides school needs: 0=Otherwise 83 (44.39), 1=Yes 104 (55.61) | | | | | |
| p443 | Always parent/ guardian provides school needs: 0=Otherwise, 125 (66.84); 1=Yes, 62 (33.16) | | | | | |
| p461 | Very often siblings assist with homework: 0=Otherwise, 176 (94.12); 1=Yes, 11 (5.88) | | | | | |
| p464 | Siblings do not at all assist with homework: 0=Otherwise, 126 (67.38); 1= 61 (32.62) | | | | | |
| p49 | Parent/ guardian buys extra books: 0=No, 155 (82.89), 1=Yes, 32 (17.11) | | | | | |
| p41032 | Agree: Parents/ guardian interested in parents' groups: 0=Otherwise, 134 (71.66); 1=Yes, 53 (28.34) | | | | | |
| p41051 | Strongly agree: Motivated by parents to perform well: 0=Otherwise, 165 (88.24); 1=Yes, 22 (11.76) | | | | | |
| p41054 | Disagree: Motivated by parents to perform well: 0=Otherwise, 124 (66.31); 1=Yes, 63 (33.69) | | | | | |

Note. Min=Minimum; Max=Maximum; se(mean)=Standard Error of the Mean; Std.Dev.=Standard Deviation

Source: Field Data, 2016

**Table 2. Correlation Matrix between the Outcome Variable (P53), the Explanatory Variable (Swi3) and the Covariates for School Attendance**

| Variable | | p53 | swi3 | p13 | p182 | p112 | p11421 | p11432 |
|---|---|---|---|---|---|---|---|---|
| p53 | | 1 | | | | | | |
| swi3 | a | 0.034 | 1 | | | | | |
| | b | 0.643 | | | | | | |
| p13 | a | 0.157 | 0.032 | 1 | | | | |
| | b | 0.032 | 0.666 | | | | | |
| p182 | a | -0.160 | -0.029 | -0.056 | 1 | | | |
| | b | 0.029 | 0.697 | 0.448 | | | | |
| p112 | a | 0.169 | 0.162 | 0.314 | 0.000 | 1 | | |
| | b | 0.021 | 0.027 | 0.000 | 0.998 | | | |
| p11421 | a | -0.151 | -0.043 | -0.030 | -0.039 | -0.173 | 1 | |
| | b | 0.040 | 0.557 | 0.689 | 0.601 | 0.018 | | |
| p11432 | a | -0.165 | 0.002 | -0.183 | -0.004 | -0.174 | 0.337 | 1 |
| | b | 0.024 | 0.981 | 0.012 | 0.957 | 0.017 | 0.000 | |
| p11434 | a | 0.162 | 0.048 | 0.083 | -0.004 | 0.159 | -0.221 | -0.373 |
| | b | 0.027 | 0.510 | 0.258 | 0.958 | 0.029 | 0.002 | 0.000 |
| p442 | a | -0.168 | 0.002 | -0.111 | -0.023 | -0.257 | 0.088 | 0.066 |
| | b | 0.021 | 0.984 | 0.132 | 0.757 | 0.000 | 0.234 | 0.368 |
| p443 | a | 0.190 | 0.106 | 0.205 | -0.079 | 0.328 | -0.160 | -0.164 |
| | b | 0.009 | 0.149 | 0.005 | 0.284 | 0.000 | 0.028 | 0.025 |
| p49 | a | 0.178 | 0.006 | 0.204 | -0.018 | 0.203 | -0.155 | -0.319 |
| | b | 0.015 | 0.936 | 0.005 | 0.807 | 0.005 | 0.034 | 0.000 |
| p41032 | a | 0.161 | -0.064 | 0.111 | -0.097 | 0.110 | -0.132 | -0.217 |
| | b | 0.028 | 0.384 | 0.131 | 0.188 | 0.135 | 0.072 | 0.003 |
| p41051 | a | 0.162 | 0.065 | 0.081 | -0.122 | 0.099 | -0.084 | -0.083 |
| | b | 0.026 | 0.374 | 0.269 | 0.097 | 0.176 | 0.252 | 0.260 |
| p41054 | a | -0.161 | -0.060 | -0.046 | 0.007 | -0.170 | 0.134 | 0.258 |
| | b | 0.028 | 0.418 | 0.532 | 0.929 | 0.020 | 0.068 | 0.000 |

Note: a=Pearson correlation coefficient; b=p-values (α=0.05); Pair-wise correlation: ≤0.35 = Weak correlation; 0.36-0.67 = Moderate correlation; 0.68-0.89=Strong correlation; ≥0.90 = Very strong correlation; Adapted from "Interpretation of correlation coefficient, " by R. Taylor, 1990, Journal of Diagnostic Medical Sonography, 6(1), p. 37

**Table 3. Multiple Linear Regression Coefficients of the Effect of Student's Socio-Economic Status on School Attendance ance**

| Variable | Variable label | Model 1 (p53) | | | Model 2 (p53) | | | Model 3 (p53) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | U.Coef | *P* | B | U.Coef | *P* | B | U.Coef | *p* | β |
| swi3 | Student's Wealth Index: 1=High SES (Ref) | | | | | | | | | |
| | 2=Middle SES | -3.62 | 0.237 | -0.10 | -3.21 | 0.29 | -0.09 | -2.63 | 0.410 | -0.07 |
| | 3=Low SES | 1.45 | 0.629 | 0.04 | 0.17 | 0.96 | 0.00 | 0.49 | 0.880 | 0.01 |
| p13 | Student's grade | | | | 1.44 | 0.24 | 0.09 | 1.34 | 0.277 | 0.09 |
| p182 | Student has repeated class 2 | | | | -6.85 | 0.05 | -0.15 | -6.47 | 0.070 | -0.14 |
| p112 | Student's school has lunch programme | | | | 3.37 | 0.26 | 0.10 | 2.00 | 0.503 | 0.06 |
| p11421 | Some of the respondent's friends attend class regularly | | | | -2.76 | 0.28 | -0.08 | -2.42 | 0.339 | -0.07 |
| p11432 | Some of the respondent's friends work hard in their academic work | | | | -2.41 | 0.38 | -0.07 | -1.50 | 0.62 | -0.04 |
| p11434 | All of the respondent's friends work hard in their academic work | | | | 4.99 | 0.13 | 0.09 | 4.03 | 0.259 | 0.07 |
| p442 | Sometimes parent/ guardian provides school needs | | | | | | | -4.55 | 0.219 | -0.13 |
| p443 | Always parent/ guardian provides school needs | | | | | | | -1.54 | 0.718 | -0.04 |
| p49 | Parent/ guardian buys extra books | | | | | | | 0.90 | 0.825 | 0.02 |
| p41032 | Agree: Parents/ guardian interested in parents' groups | | | | | | | 2.23 | 0.366 | 0.06 |
| p41051 | Strongly agree: Motivated by parents to perform well | | | | | | | 3.73 | 0.278 | 0.07 |
| p41054 | Disagree: Motivated by parents to perform well | | | | | | | -2.44 | 0.391 | -0.07 |
| Constant | | 231.38 | <.001 | n/a | 223.92 | <.001 | n/a | 227 | <.001 | n/a |
| swi3_2 | Middle SES | | | | | (F(1, 172)=0.68, p=0.4100) | | | | |
| swi3_3 | Low SES | | | | | (F(1, 172)=0.02, p=0.8800) | | | | |
| N | | 187 | | | 187 | | | 187 | | |
| $R^2$ | | 0.0157 | | | 0.1045 | | | 0.1358 | | |
| Root Mean Squared Error (RMSE) | | 16.88 | | | 16.37 | | | 16.36 | | |

Note. U.Coef=Unstandardized Coefficient; RMSE=Standard deviation of the regression model (the closer to zero better the fit)
Source: Stata Output, 2016

The positive sign of the coefficient indicates increased number of days present for the four terms for the years 2015-2016 while the negative sign indicates decreased number of days present for the four terms for the years 2015-2016. The value of the coefficient indicates the number of days present for the four terms. The significance of the relationship between a given independent variable and the dependent variable is tested at $p$=0.05. Results of the regression analysis are reported in Table 3. The findings of model 1 in Table 3 indicate that the student's SES is not associated with school attendance. The middle SES tertile is associated with up to -3.620902 ($p$=0.237) days decrease in attendance compared with the high SES. The low SES tertile is associated with up to 1.447581 ($p$=0.629) days increase in school attendance compared with the high SES tertile. The model's constant is statistically significant 231.38 ($p$<.001).

In model 2, controlling for the student's background information, their SES is still not associated with school attendance. None of the regression coefficients for the control variables were also statistically significant at the 0.05 alpha level. The model's constant is statistically significant 223.920 ($p$<.001) and the overall model was statically significant at $p$=0.001. Finally, for model 3 controlling for the students background information, and their home environment variables (home climate), their SES is still not statistically significantly associated with school attendance. None of the regression coefficients for all the control variables were also statistically significant at the 0.05 alpha level although repetition in class 2 was associated with up to -6.465455 days decrease in school attendance ($p$=0.070) the model's constant is statistically significant at 223.9218 ($p$<.001) while the overall model was statistically significant, at $p$=0.002. The F-statistics ($F$(1, 172)=0.68, $p$=0.4100) and ($F$(1, 172)=0.02, $p$=0.8800) results for the middle and low SES showed that pupils parental socioeconomic status has no statistically significant effect on participation of pupils in special units in public primary schools in Kakamega County. Therefore the study failed to reject the null hypothesis. The results indeed indicate that participation in special units in public primary schools in Kakamega County is not a function of a pupils parental SES.

The results of this study provide empirical evidence which is inconsistent with research that shows that school participation is highly dependable on pupils SES (Odoemana & Opara, 2012), who postulated that families from low SES are more likely to face challenges in acquiring basic needs for a special needs child because of extreme poverty hindering participation of such children in school. Furthermore, Casanova, Garcialinares, Torre & Carpio (2005) also content that well to do families are more likely to educate their children in special units while their poor counterparts are forced to either educate the child at home or leave them there while they go out to work. The results also differ from those of Njeru (2014) and who did an analysis of factors influencing low enrolment and retention of girls with disabilities focusing mainly on integrated public primary schools. They found that the higher the level of education, occupation and income of parents the higher the chances of enrolment in school and vice versa. A similar study by Mutua (2013) found that school learning facilities, parental level of education, family income and cost of education were indicators for socio economic status that affect participation of students with special needs. Findings by Tyler (1977), Anderson (1967) and Juma (1994) indicate similar results.

The variance in the findings could be attributed to a number of reasons. One of them could be the way special education is provided in Kenya. There are fewer private special units compared to public ones in Kakamega County. Besides, this study studied special units that were integrated in the public primary schools. Such schools are known to be accessed by household of varied SES. This could be the reason for the invariance of pupils with special needs participation in the special units by their SES tertile. These empirical results suggest that existing policies in the provision of special education by the government enhance equity in pupil's participation in special units irrespective of their parental SES. The findings also suggest that the policy to amalgamate special units within the public primary schools enhances access of special units to all households. Another reason for the variation in study findings with others could be the methodology of data

analysis. This study used Principal component analysis using household asset ownership to categorize pupils into SES tertiles. The study also modelled the effect of parental SES on pupil's participation while controlling for other variables.

The multiple regression results are corroborated with the structured questionnaire results for the teachers on the drivers of pupils with special needs participation in special units in Kakamega County. Most of the teachers felt that the government funding of pupils with special units is the driver of why pupils with special units attend special units. The special units receive government subsidy of 2,200/- per child per year to cater for some of their needs such as provision of a snack/ porridge. This suggests that irrespective of the pupils with special needs SES, they can be able to attend school out of the government subsidy. This may imply that student's wealth index is not necessarily a hindrance to school attendance of pupils with special needs as indicated by the results of the regression model in Table 3. In fact according to the specially trained teachers, most special needs learners attend school as their parents prefer they stay in school other than being a bother to them at home. Teachers also alluded to the fact that some parents want pupils with special needs in school because at school, the pupils are assured of a meal in form of snacks. The introduction of free primary education for all Kenyan children in 2003, led to the development of World Food Programme (WFP) alongside national policies of increased health, attendance and performance (MoEST, 2004). According to WFP (2011) findings, averagely attendance in schools that offer meals is 28 percent higher than schools that do not. This is supported by some studies which found that feeding programs had a positive effect on pupils' attendance in school. Provision of food, act as a strong incentive to attend school on a regular basis (Owoko, 2014; Japhari, 2014; Mkanyika, 2014).

**Conclusions and Recommendations**

The findings suggest that pupil's participation in special units does not differ along student wealth index tertiles. Pupil's days decrease in attendance despite their socio economic status. This highly suggests that the government policy on integration of special units in public primary schools has increased access and equity in school participation for pupils with special needs. The findings also show that those who repeated in Class 2 were associated with up to six days decrease in school attendance. This also suggests that repetition of pupils with special needs leads to low participation in special units. Based on the findings and conclusions, it is therefore recommended that the government policy on integration of special units in public primary schools be enhanced to ensure that all public primary schools in Kakamega County have at least a special unit so as to further improve equity and access in school participation of pupils with special needs.

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