# Family Type and Participation of Pupils' in Special Units in Public Primary Schools in Kakamega County, Kenya

Lornah C. Nakera Sirima<sup>1</sup> and Catherine Muhonja Aurah<sup>2</sup>

<sup>1</sup>Masinde Muliro University of Science and Technology, P. O. Box 190-50100 Kenya; Email <sup>2</sup>Masinde Muliro University of Science and Technology, P. O. Box 190-50100 Kenya; Email Corresponding author: Lornah C. Nakera Sirima

**Abstract:** Educational inclusion and participation are often seen as human rights issues and essential components of social justice. This study sought to establish the effect of family type on participation of pupils in special units in public primary schools in Kakamega County. The study was guided by Chinapah Vinayagum learning model and used descriptive research survey design. A sample of 226 was selected using multi-stage sampling technique. Data was collected using questionnaires. 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 conducted to validate the instruments. Data was analysed descriptively (percentages and means) and inferentially (multiple linear regression) by aid of Stata version 12.1 at 0.05 level of significance. The multiple regression results show that selected variables; both parents' dead, sibling has a hearing challenge, parent/guardian buys extra books and pupils strongly agreeing that their parents motivate them to perform well improved pupils with special needs participation in special units. However, an extra girl with special needs in a household led to a decrease in respondent's school attendance. It is therefore recommended that households with many girls with special needs be assisted financially to enhance girls with special needs participation in special units.

Keywords: Family Type, Participation, Special Unit, Primary School, Multiple Regression

Date of Submission: 24-07-2017

Date of acceptance: 05-08-2017

------

# I. Introduction

Education is a fundamental right for all children, including children with disabilities to the extent that it is regarded as having double dimensions as a human right in itself and an indispensable means of realising other rights [1]. Primary education is one of the components that make up the umbrella right to education [1]. The right is guaranteed in a number of human rights treaties, which include the United Nations (UN) Convention on the Rights of the Child (CRC); the African Charter on the Rights and Welfare of the Child (ACRWC); and the Convention on the Rights of Persons with Disabilities (the CRPD).

Attention to the conditions of people with disabilities resulted in reforms in Europe including the reevaluation of special schools. In the United States throughout the mid half of the 20th century, special schools were not only accepted, but encouraged [2]. The Amendments to the Individuals with Disabilities Education Act (<u>IDEA</u>) of 1997 led to school districts in the United States to slowly integrate students with moderate and severe special needs into regular school systems [3]. The United Nations Children's Fund [4] 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 [5].

Pressures exerted by disabled persons organizations contributed to the proclamation of the African Decade of Disabled Persons (2000-2009) at the AU Assembly of Heads of State and Government, meeting at Lomé in July 2000, aimed at promoting awareness and commitment to full participation, equality and empowerment of persons with disabilities in Africa [6]. Early efforts to educate persons with disabilities in developing countries in general were made by missionaries. Since then, the various governments have become more sensitive and committed. Special schools, classes, units and resource centres have been built. Teacher training facilities have been established locally in some cases, and more teachers have been trained locally and abroad [7].

Both African governments and NGOs have taken steps to address the disability problem. After the World Conference on Education for All (EFA), held in Jomtein, Thailand, in 1990, many countries embraced universal education for all [8] and Kenya was not left behind. This was evident from the various products by the government such as the Koech Report [9], 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 [10] 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.

Parents (family) are the first point of contact of children. When both parents are present, it implies that the child would derive most care [11]. The level of education of parents has been linked as a factor hindering school participation of children with disability. Ortese [11] further point out that, organizations of and for families with children with disabilities can be an important resource for parents and other family members, allowing them to learn from others in similar situations and providing them with relevant information and support. If a parent has a lower education level chances are that he/she may not enrol their child in primary school since they do not know the importance of education. While it may not be entirely their fault, an effort should be made to sensitize them on the importance of getting an education.

Family background is the foundation for children's development, as such family background in terms of family structure, size, socio-economic status and educational background play important role in students' educational attainment and participation [12]. A single parent family according to Tenibaije [13] and Eweniyi [14] is one that is composed only of father or mother due to various reasons for example, death of a parent, divorce, separation and dissertation. Group discussions, one-on-one listening, support groups for parents of children with similar disabilities and other potential interventions can provide opportunities to share experiences and encourage peer support and guidance. According to Kolucki and Lemish [15], the use of stories that feature children with disabilities as protagonists is one way to demonstrate to all family members, including the child with a disability, that many capabilities are present and should be cultivated. Therefore, promoting appropriate activities that caregivers and children with disabilities can do together to improve developmental outcomes in children with disabilities is essential.

According to World Health Organization, home visits by community workers combined with centrebased support can also be an effective way to increase the confidence and competencies of parents and engage their significant others in supporting the development of children with disabilities. Providing literacy and educational opportunities for adolescent girls and mothers can also have a direct impact on improving their caregiving competencies. In large families, children with disabilities are not given a priority when it comes to education matters; they are mostly left at home as their siblings are enrolled in school while in fact they ought to be accorded the first priority since they cannot take themselves to school.

Therefore, participation in school is considered to be a vital part of children's development, which is related to their quality of life and future life outcomes (Law, King, Rosenbaum, Young, & Kertoy [16]. 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 [9]. 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 [17]. This interaction not only benefits the child with special needs, but also helps children without special needs learn about tolerance and acceptance of others. All children, including those with special educational needs have a right to education which is appropriate to their needs.

The right to education is recognized in both international and national law notably in the Constitution of Kenya 2010, Basic Education Act 2014 and Disability Act 2003 as well as the International Covenant on Economic and Social Cultural Rights (ICESCR) to which Kenya is a signatory. Further, 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 (SDGs). Although the government of Kenya has committed itself to providing Education to all school age children regardless of any kind of distinction, participation of pupils in special units still remain low. The aim 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 background that this study sought to establish the effect family type on participation of pupils in special units in public primary schools in Kakamega County, Kenya.

# Research Design

# II. Methodology

The study adopted a descriptive survey research design. The descriptive survey design was deemed appropriate for the study as it gives the researcher more control over the research procedure and also allows a researcher to

collect quantitative data which can be analyzed quantitatively using descriptive and inferential statistics [18]. Further, descriptive survey design was relevant because this study investigated the effect of family type on participation of pupils in special units in public primary schools which enabled testing the hypotheses concerning the current status of the subjects of the study.

#### Sampling Techniques and Sample Size

The study targeted a total of 34 public primary schools with special units in Kakamega County handling pupils with visual, physical and hearing impairment. The sampling unit was pupils of class five to eight. The public and day primary schools with special units in each of the twelve sub counties 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 class five to eight 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 and 24 teachers in charge of the twenty four special units). 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 Mugenda and Mugenda, [19] recommendation of 30% as the minimal percentage for a descriptive study.

#### Instrumentation

Two sets of questionnaire: Pupil in Special Unit Questionnaire (PISUQ) and Special Unit Teachers Questionnaire (SUTQ) were designed and used to collect information from pupils enrolled in special units and special units' teachers respectively. In addition, document analysis check list was used to solicit qualitative data for the study. 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 0.821 and 0.838for the pupils and teachers questionnaire respectively was obtained: an indicator that the instruments were of high reliability [20].

#### Data Analysis

Descriptive statistics in form of percentages and means were used to describe the study population while inferentially statistics were used to make deductions and generalizations about the whole population. Thematic reporting of data from teacher open ended questionnaire was also included. Inferential statistics using multiple linear regression. The outcome variable was measured on an interval scale while the predictor variable was measured on an ordinal scale using the multiple linear regression strategy. Regression analysis was pursued for variables that were significantly correlated with the dependent variable at  $\alpha$ =.05. on a two-tailed test by aid a computer programme Stata version 12.1.

#### Preliminary Findings

### III. Research Findings And Discussion

The purpose of the study was to determine the effect of family type on participation of pupils in special units in public primary schools in Kakamega County. The study used MLR model to test the null hypothesis that family type has no statistically significant effect on participation of pupils in special units in public primary schools in Kakamega County. To establish which plausible associations to pursue in the linear regression model the researcher run a pair-wise correlation. The results are shown in Table 1. In addition, the model diagonistic results of scatter plot, linktest and variance inflation factor, showed that all variables were included in the model, the model was correctly specified and that the regression model did not experience collinearity problems.

| Variable |   | p53    | p182   | p113   | p311   | p312  | p313 | p32 |
|----------|---|--------|--------|--------|--------|-------|------|-----|
| p53      |   | 1.000  |        |        |        |       |      |     |
| p182     | а | 0.154  | 1.000  |        |        |       |      |     |
|          | b | 0.035  |        |        |        |       |      |     |
| p113     | а | 0.172  | 0.001  | 1.000  |        |       |      |     |
|          | b | 0.019  | 0.995  |        |        |       |      |     |
| p311     | а | 0.013  | -0.242 | 0.087  | 1.000  |       |      |     |
|          | b | 0.862  | 0.001  | 0.239  |        |       |      |     |
| p312     | а | -0.017 | 0.256  | -0.002 | -0.551 | 1.000 |      |     |

 Table 1: Correlation Matrix between the Outcome Variable, the Explanatory Variables for School

 Attendance

|             |           |                 |                  | -              |                  |                          |                   | -             |
|-------------|-----------|-----------------|------------------|----------------|------------------|--------------------------|-------------------|---------------|
|             | b         | 0.814           | 0.000            | 0.974          | 0.000            |                          |                   |               |
| p313        | а         | 0.082           | 0.080            | -0.078         | -0.529           | -0.1910*                 | 1.000             |               |
| 1           | b         | 0.266           | 0.277            | 0.290          | 0.000            | 0.009                    |                   |               |
| p32         | а         | 0.097           | -0.031           | -0.036         | 0.107            | 0.066                    | 0.063             | 1.000         |
|             | b         | 0.186           | 0.674            | 0.625          | 0.145            | 0.370                    | 0.389             |               |
| p341        | а         | -0.090          | -0.039           | 0.013          | -0.005           | 0.002                    | -0.002            | -0.068        |
| 1           | b         | 0.221           | 0.598            | 0.862          | 0.949            | 0.977                    | 0.984             | 0.359         |
| p342        | а         | 0.094           | -0.037           | -0.093         | 0.071            | -0.143                   | 0.088             | -0.064        |
| -           | b         | 0.200           | 0.615            | 0.207          | 0.337            | 0.051                    | 0.232             | 0.384         |
| p35a        | а         | -0.029          | 0.005            | -0.095         | -0.072           | 0.071                    | -0.006            | -0.011        |
| •           | b         | 0.698           | 0.951            | 0.194          | 0.328            | 0.336                    | 0.933             | 0.881         |
| p35b2       | а         | -0.048          | -0.012           | -0.127         | -0.080           | 0.072                    | 0.008             | -0.034        |
|             | b         | 0.517           | 0.874            | 0.084          | 0.274            | 0.328                    | 0.917             | 0.649         |
| p35c2       | а         | -0.057          | -0.072           | -0.082         | -0.093           | 0.069                    | 0.035             | -0.065        |
|             | b         | 0.440           | 0.330            | 0.262          | 0.205            | 0.347                    | 0.637             | 0.381         |
| p361        | а         | -0.010          | -0.053           | -0.037         | 0.156            | -0.050                   | -0.107            | 0.037         |
|             | b         | 0.898           | 0.469            | 0.612          | 0.033            | 0.494                    | 0.145             | 0.616         |
| p362        | а         | 0.085           | 0.101            | 0.079          | -0.002           | 0.015                    | 0.021             | 0.025         |
|             | b         | 0.248           | 0.170            | 0.281          | 0.984            | 0.836                    | 0.780             | 0.739         |
| p363        | а         | -0.120          | -0.088           | -0.114         | -0.183           | 0.121                    | 0.080             | -0.087        |
|             | b         | 0.101           | 0.230            | 0.120          | 0.012            | 0.100                    | 0.275             | 0.237         |
| p37         | а         | -0.042          | -0.089           | -0.007         | 0.048            | -0.077                   | 0.066             | -0.104        |
|             | b         | 0.564           | 0.226            | 0.921          | 0.513            | 0.294                    | 0.373             | 0.156         |
| p461        | а         | -0.155          | 0.007            | 0.012          | -0.030           | -0.050                   | 0.019             | -0.277        |
|             | b         | 0.035           | 0.923            | 0.868          | 0.683            | 0.494                    | 0.802             | 0.000         |
| p464        | а         | 0.159           | 0.199            | -0.022         | -0.183           | 0.027                    | 0.080             | 0.024         |
|             | b         | 0.030           | 0.006            | 0.767          | 0.012            | 0.712                    | 0.276             | 0.744         |
| p49         | а         | -0.164          | -0.018           | 0.158          | 0.106            | -0.126                   | 0.041             | 0.067         |
|             | b         | 0.025           | 0.807            | 0.031          | 0.147            | 0.085                    | 0.580             | 0.361         |
| p41032      | а         | -0.154          | -0.097           | 0.130          | 0.169            | -0.025                   | -0.106            | 0.011         |
|             | b         | 0.036           | 0.188            | 0.077          | 0.021            | 0.733                    | 0.151             | 0.882         |
| p41051      | а         | -0.155          | -0.122           | 0.116          | 0.024            | -0.029                   | 0.073             | 0.054         |
|             | b         | 0.034           | 0.097            | 0.115          | 0.745            | 0.695                    | 0.322             | 0.463         |
| p41054      | а         | 0.149           | 0.007            | -0.017         | -0.140           | 0.108                    | 0.007             | -0.129        |
|             | b         | 0.042           | 0.929            | 0.817          | 0.055            | 0.141                    | 0.922             | 0.078         |
| Note: a-Dea | reon corr | alation coeffic | ient: h-n values | (a=0.05): Pair | wise correlation | $\cdot < 0.35 = Weak co$ | relation: 0.36.04 | 57 – Moderate |

Family Type and Participation of Pupils' in Special Units in Public Primary Schools in Kakamega ..

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

# Multiple Regression Models on the Effect of Family Type on Participation (Attendance) of Pupils in Special Units in Public Primary Schools

Three models in a regression analysis were used to measure the relationship between family type variables and student's school attendance. Model 1 measured the effect of family type variables on school presence/attendance, the second model fitted the effect of family type variables on school attendance controlling for the student's background information while in model three the researcher measured the effect of SES on school attendance controlling for the student's background information and home environment variables. The value of the coefficient indicated the number of days present for the four terms. The result of the multiple regression models is presented in Table 2.

Results in model 1 show that, none of the explanatory variables was significantly associated with school attendance at 5% sig level because none had a significant correlation with school participation (school presence). Curiously, an extra girl in the household as sibling is associated with -1.42 days (p=0.064) decrease in respondents school attendance, although significant at 10% level. The model's constant is statistically significant 240.80 (p<.001). The overall model was statistically significant at p=0.0049. Findings for model 2 controlling for the students background information reveal that, an extra girl in the household as sibling to the respondent becomes significant at 5% and is associated with -1.52 days (p=0.039) decrease in respondent's

school attendance. The results may suggest that girls with special needs require extra resources to attend special units. Some studies have suggested that girls require more family resources to attend schools compared to boys [21; 22]

| Variable       | Variable label  | Mo     | del 1 (p53 | )     | Model 2 (p53) |       |       | Model 3 (p53) |       |       |
|----------------|---|--------|------------|-------|---------------|-------|-------|---------------|-------|-------|
|                |   | U.Coef | Р          | В     | U.Coef        | р     | β     | U.Coef        | р     | β     |
| p311           | Both parents alive  | -4.7   | 0.34       | -0.14 | -4.8          | 0.329 | -0.14 | -7.14         | 0.163 | -0.21 |
| p312           | Single parent   | -5.2   | 0.305      | -0.11 | -1.89         | 0.724 | -0.04 | -3.21         | 0.552 | -0.07 |
| p313           | One parent dead   | -8.04  | 0.164      | -0.17 | -7.91         | 0.199 | -0.17 | -9.71         | 0.121 | -0.21 |
| p32            | Lives in parent/ guardian home  | -5.91  | 0.201      | -0.05 | -8.36         | 0.143 | -0.07 | -8.04         | 0.189 | -0.07 |
| p341           | Number of sibling boys  | 0.82   | 0.349      | 0.07  | 0.42          | 0.62  | 0.04  | 0.63          | 0.459 | 0.06  |
| p342           | Number of sibling girls   | -1.42  | 0.064      | -0.14 | -1.52         | 0.039 | -0.15 | -1.6          | 0.03  | -0.16 |
| p35a           | Number of siblings with   | -5.37  | 0.267      | -0.15 | -6.72         | 0.235 | -0.19 | -6.18         | 0.244 | -0.18 |
| p35b2          | disabilities<br>Challenged siblings are of school<br>going age          | -0.03  | 0.997      | 0     | 4.52          | 0.638 | 0.1   | 5.47          | 0.575 | 0.12  |
| p35c2          | Challenged siblings are enrolled in school                              | -0.58  | 0.913      | -0.01 | -4.09         | 0.489 | -0.08 | -5.01         | 0.409 | -0.09 |
| p361           | Sibling is visually challenged  | 7.75   | 0.451      | 0.11  | 8.41          | 0.505 | 0.12  | 6.38          | 0.595 | 0.09  |
| p362           | Sibling is physically challenged  | -3.71  | 0.716      | -0.04 | -1.34         | 0.911 | -0.01 | -2.08         | 0.862 | -0.02 |
| p363           | Sibling is hearing challenged   | 15.02  | 0.111      | 0.25  | 12.76         | 0.28  | 0.21  | 11.33         | 0.303 | 0.19  |
| p37            | Student's birth position  | 0.69   | 0.304      | 0.08  | 1.1           | 0.133 | 0.12  | 1.02          | 0.159 | 0.11  |
| p13            | Student's grade   |        |            |       | 1.19          | 0.341 | 0.08  | 0.8           | 0.528 | 0.05  |
| p182           | Student has repeated class 2  |        |            |       | -6.33         | 0.119 | -0.14 | -5.94         | 0.154 | -0.13 |
| p112           | Student's school has lunch programme                                    |        |            |       | 4.4           | 0.165 | 0.13  | 2.81          | 0.361 | 0.08  |
| p11421         | Some of the respondent's friends attend class regularly                 |        |            |       | -3.66         | 0.162 | -0.11 | -3.07         | 0.24  | -0.09 |
| p11432         | Some of the respondent's friends<br>work hard in their academic<br>work |        |            |       | -1.81         | 0.515 | -0.05 | -0.47         | 0.877 | -0.01 |
| p11434         | All of the respondent's friends<br>work hard in their academic<br>work  |        |            |       | 6.87          | 0.056 | 0.12  | 5.42          | 0.133 | 0.09  |
| p442           | Sometimes parent/ guardian<br>provides school needs                     |        |            |       |               |       |       | -2.19         | 0.583 | -0.06 |
| p443           | Always parent/ guardian<br>provides school needs                        |        |            |       |               |       |       | 0.02          | 0.996 | 0.00  |
| p49            | Parent/ guardian buys extra books                                       |        |            |       |               |       |       | 3.33          | 0.428 | 0.07  |
| p41032         | Agree: Parents/ guardians<br>interested in parents' groups              |        |            |       |               |       |       | 2.43          | 0.335 | 0.06  |
| p41051         | Strongly agree: Motivated by parents to perform well                    |        |            |       |               |       |       | 5.50          | 0.095 | 0.10  |
| p41054         | Disagree: Motivated by parents to perform well                          |        |            |       |               |       |       | -2.66         | 0.363 | -0.07 |
| Constant       |   | 240.8  | <.001      | n/a   | 235.75        | <.001 | n/a   | 239.96        | <.001 | n/a   |
| Ν              |   |        | 187        |       |               | 187   |       |               | 187   |       |
| $\mathbb{R}^2$ |   | 0.0678 |            |       | 0.1637        |       |       | 0.2043        |       |       |
| Root Mean      | Squared Error (RMSE)  | 16.94  |            |       | 16.33         |       |       | 16.23         |       |       |

| <b>Table 4.2:</b> Multiple linear regression coefficients of the effect of family type variables on pupil's school |
|--|
| attendance   |

Note. U.Coef=Unstandardized Coefficient; RMSE=Standard deviation of the regression model (the closer to zero better the fit)

Source: Stata Output, 2016

The results suggest that with increased number of girls with special needs family resource burden may increase making it difficult for parents or guardians to take girls with special needs to school. Other findings indicate that parents are always worried with the safety of girls with special needs [21; 4]. With increased

number of such girls in household the matter may be further complicated. The WHO World Report on disability indicates that girls with disabilities suffer a double discrimination facing not only the stigma, prejudice and inequities encountered by many persons with disabilities, but also exclusion as a consequence of gender discrimination. This makes them less likely than either boys with disabilities or girls without disabilities to obtain health care, get an education, receive vocational training, find employment or benefit from full inclusion in the social, political or economic lives of their families [4; 22; 23], Girls with disabilities are more likely not to attend school due to increased risk of forced marriage, emotional, physical and sexual violence [22].

Only in model1, the explanatory variables are still not significantly associated with school attendance. None of the other regression coefficients for the control variables were also statistically significant at the 0.05 alpha level except p11434, when all of the respondent's friends work hard in their academic work, which has up to 6.87 days increase on school attendance (p=0.056) at 10% significance level. The findings suggest that a pupil with special needs participation is influenced by their peer's success in academics in the special units. The results further suggest that the greatest motivator of pupils with special needs participation in special units is whether their peers excel in academics. Other studies [24; 25] indicate that children are socialized by the people with whom they associate; through daily interaction over the course of many years; acceptable social customs are taught and fostered. This has great impact on their decision in school participation. The model's constant is statistically significant 235.75 (p<.001) and the overall model was statically significant (p=0.007).

Model 3 controlled for student's background information and home environment variables (home climate) that were significantly correlated with the outcome variable. Family type variables were not significantly correlated with p53 and so were not controlled for in this final model. The results reveal that in controlling for the students background information, and their home environment variables (home climate), an extra girl in the household as sibling to the respondent is still significant at 5% and is associated with -1.60 days (p=0.030) decrease in respondent's school attendance.

Family type variables are 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. However, at 10% significance level, if the respondent strongly agrees that they are motivated by parents to perform well in school, then their school attendance is boosted by up to 5.50 days (p=0.095). The findings suggest that parental involvement is positively correlated with pupils with special needs participation in special units in public primary schools in Kakamega County. Other studies have shown similar results. For instance studies by Dearing, McCartney, Weiss, Kreider, & Simpkins, [26]; Dearing, Kreider, Simpkins, & Weiss, [27]; Machen, Wilson & Notar, [28] indicate that parental involvement highly improves pupils attendance in school. They argue that pupils believe in what their parents stand for and want them to be hence motivating them to attend school in order to meet parental involvement characterized by parental' values and attitudes regarding education and the aspirations they hold for their children directly influence academic outcomes, promotes children's motivation to attend school and increases children's persistence in schooling.

The results indicate that the model's constant is statistically significant 239.96 (p<.001) and the overall model was statistically significant at p=.002. With an extra girl-sibling in the household (p342) having statistically significant post estimation result, F(1, 161) = 4.80, p=0.0299), the researcher reject the null hypothesis that Family type has no statistical significant effect on participation of pupils in special units in public primary schools and conclude that selected family type variables have an effect on respondents' school attendance. These results concur with those of Joachim & Eskay [31] who aimed at establishing the relationship between parents' socio-economic status and students with disabilities' academic performance in Junior Secondary School that showed a strong and positive relationship. The correlation had a high strength of 0.99 showing a very close relationship between family structure and students' participation. Further, the findings are consistent with the findings of Uwaifor [32] and Eneji, Obogo & Dunnamah [33] who found that there is a significant correlation between family type and socioeconomic status and female student's school dropout. However, the findings differ with the outcome of the study by Okeke [34] which found that students' participation is independent of their family structure.

# IV. Conclusions And Recommendations

The findings of effect of family type on participation of pupils in special units in public primary schools in Kakamega County indicate that selected family type variables have an effect on respondents' school attendance; both parents' dead, sibling has a hearing challenge, parent/guardian buys extra books and strongly agree: Motivated by parents to perform well. An extra girl in the household as sibling also correlated with attendance as it led to a decrease in respondent's school attendance suggesting that households with many girls with special needs are more likely to record low participation in special units. Further, the researcher found that, when all of the respondent's friends work hard in their academic work and the respondent strongly agrees that they are motivated by parents to perform well in school, led to more days increase on school attendance. This suggests that pupils with special needs are highly motivated to participate in special units when they see their

counterparts working hard in such units. This further suggests that pupils in special units need great motivation from peers to increase their participation. The findings also suggest that high parental support of pupils with special needs improves pupil's participation in special units.

#### References

- [1]. UNICEF, (2001). Promoting children's participation in democratic decision-making. Florence: UNICEF Innocenti Insight
- [2]. Turnbull, H. R., Beegle, R. & Stowe, M.J. (2007). Public policy and developmental disabilities: A 35 retrospective and a 5 yeart prospective on the core concepts in disability. In: S. Odom, R.H. Horner, M.E. Snell, & J. Blacher, Handbook on Developmental Disabilities, 15-34. London: Guilford Press.
- [3]. Jorgensen, C.M. (1998). Restructuring high school for all students: Taking inclusion to the next level. Baltimore: Paul H. Brooks Publishing co.
- [4]. UNICEF (2013) Children and Young People with Disabilities Fact Sheet. May 2013
- [5]. Global Partnership for Children, 2012, 2012 Forum, 'A qualitative study: Barriers and support for participation for children with disabilities', African Journal of Disability, 3(1), Art. #112, 1–9. <a href="https://doi.org/ajod.v3i1.112">https://doi.org/ajod.v3i1.112</a>
- [6]. Manama S. E.In: TICCS Newsletter: (2007). no. 35, p. 8-13 Voices of the disabled in Dagbon
- [7]. Abosi, C.O. (2002, August). The Curriculum and Special Needs. A Keynote Address delivered at the Recommendation 122 Inaugural Seminar held in Francis Town, Botswana.
- [8]. UNESCO (1996). A Report on Study of Education Sector in Rwanda. Kigali: UNESCO.
- [9]. Republic of Kenya (1999), Totally Integrated Quality Education and Training TIQET: Report of the commission of inquiry into the education system of Kenya, Nairobi: Government Printer.
- [10]. Children's Bill, (2001). Rights of Children. Government Printer, Kenya.
- [11]. Ortese, P. T. (1998). Single-Parenting in Nigeria; Counselling concerns and implications. The Counsellor, 16 (1): 61-66
- [12]. Osunloye, A. (2008). Family background and student academic performance. http://socyberty.com/education/family-backgroundand-student-academic performance/
- [13]. Tenibiaje, D. J. (2009). Influence of Family Size and Family Birth Order on Academic Performance of Adolescents in Higher Institution (Pakistan). Journal of Social Sciences, 6 (3): 110-114
- [14]. Eweniyi, G. D. (2005). The impact of Family Structure on University Students'Academic Performance. Olabisi Onabamijo University, Ago-lwoye. Online
- [15]. Kolucki, B., & Lemish, D. (2011). Communicating with children, principles and practices to nurture, inspire, excite, educate and heal. New York, United Nations Children's Fund.
- [16]. Law, M., King, S., King, P., Rosenbaum, M., Kertoy, K. and Young, N. L. (2003). "A conceptual model of the factors affecting the recreation and leisure participation of children with disabilities," Physical and Occupational Therapy in Pediatrics, vol. 23, no. 1, pp. 63–90,.
- [17]. Allen, K. E., & Cowdery, G. E. (2005). The exceptional child: Inclusion in early childhood education. Clifton Park, NY: Thomson Delmar Learning.
- [18]. Saunders, M., Lewis, P., & Thornhill, A. (2000). Research methods for business students (2nd ed). Harlow: Pearson Education.
- [19]. Mugenda, O. M., and Mugenda, A. G. (2003). Research Methods: Quantitative and Quantitative Approaches. Nairobi, Act Press.
- [20]. Kathuri, N. J, & Pals, D. (1993). Introduction to education research. EMC Egerton University, Njoro.
- [21]. Rachel, Williams (2013). "Why girls in India are still missing out on the education theyneed." TheGuardian, http://www.theguardian.com/education/2013/mar/11/indian-children-education-opportunities
- [22]. Robson, C and Evans, P (2005) Educating Children with Disabilities in Developing Countries: The Role of Data Sets. Huddersfield, UK: OECD. http://www.childinfo.org/ files/childdisability\_RobsonEvans2005.pdf
- [23]. United Nations (2006) Convention on the Rights of Persons with Disabilities, G.A. Res. 61/106, U.N. Doc. A/RES/61/106 (Dec.13). http://www.un.org/disabilities/default.asp?id=150
- [24]. Kirk Johnson (2000). The Peer Effect on Academic Achievement Among Public Elementary School Students. http://www.heritage.org/education/report/the-peer-effect-academic-achievement-among-public-elementary-school-students
- [25]. Chitiyo, M., Makweche-Chitiyo, P., Park, M., Ametepee, L. K., & Chitiyo, J. (2011). Examining the effect of positive behavior support on academic achievement of students with disabilities. Journal of Research in Special Educational Needs, 11(3), 171–177.
- [26]. Dearing E, McCartney K, Weiss HB, Kreider H, Simpkins S (2004). The promotive effects of family education for low-income children's literacy. Journal of School Psychology. 42:445–460.
- [27]. Dearing E, Kreider H, Simpkins S, Weiss HB (2006). Family involvement in school and low-income children's literacy: Longitudinal associations between and within families. Journal of Educational Psychology.98(4):653–664.
- [28]. Machen SM, Wilson JD, Notar CE (2004). Parental involvement in the classroom. Journal of Instructional Psychology. 32:13–16.
- [29]. Catsambis S (2001). Expanding knowledge of parental involvement in children's secondary education: Connections with high school seniors' academic success. Social Psychology and Education. 5:149–177.
- [30]. Englund MM, Luckner AE, Whaley GJL, Egeland B.(2004). Children's achievement in early elementary school: Longitudinal effects of parental involvement, expectations, and quality of assistance. Journal of Educational Psychology. 96:723–730. 4
- [31]. Joachim, C. O., & Eskay, M. (2014). Relationship Between Parents' Socio-Economic Status and Students with Disabilities' Academic Performance in Junior Secondary Schools in Owerri Education Zone 1 of Imo State of Nigeria. Indian Journal of Applied Research, Volume : 4 | Issue : 5 | May 2014 | ISSN - 2249-555X
- [32]. Uwaifo, V. O. (2008). The Effects of Family Structure and Parenthood on the Academic Performance of Nigerian University Students. Stud Home Comm Sci, 2(2): 121-12
- [33]. Eneji, C.V.O., Ubom-Bassey, A.E., Eneji, J.E.O., Obogo, G.O., & Dunnamah, A.Y. (2013). Influence of Family Types and Parents Socio-Economics Status on School Dropout among Female Students in the Old Ogoja Zone of Cross River, Nigeria, Global Advanced Research Journal of Arts and Humanities, 2(1), 7-13.
- [34]. Okeke, I.N. (2005). Influence of family background on the academic performance of adolescents in Shomolu Educational District of Lagos State. Unpublished | on academic performance of students in selected schools in Edu Lga of Kwara State Nigeria. Int. J. Acad. Res. Business Soc. Sci., 2(7): 230 239.

Family Type and Participation of Pupils' in Special Units in Public Primary Schools in Kakamega County, Kenya