



Greener Journal of Educational Research

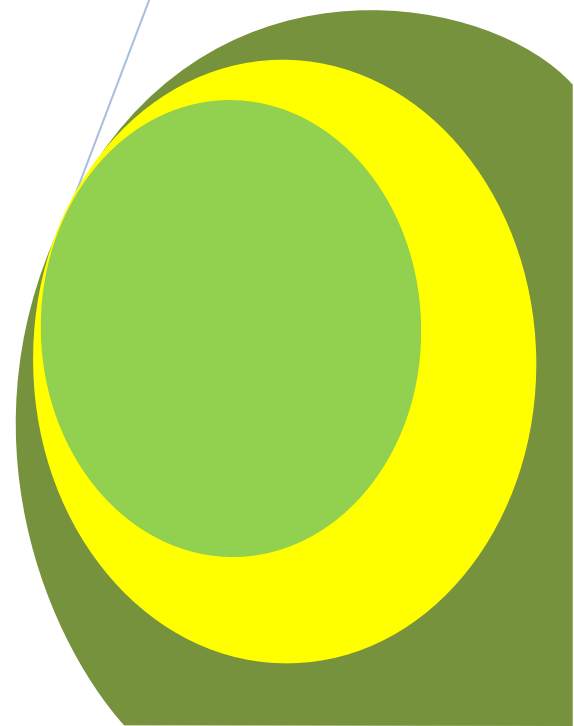
ISSN: 2276-7789 ICV: 6.05

DOI: <http://doi.org/10.15580/GJER.2016.6.051916092>

Extent Stuttering Effects Occur Among Learners Who Stutter in Primary Schools in Kenya (A Case of Kakamega County)

By

**Okutoyi Joel
Kochung J. Edward
Mbagaya V. Catherine**



Research Article (DOI: <http://doi.org/10.15580/GJER.2016.6.051916092>)

Extent Stuttering Effects Occur Among Learners Who Stutter in Primary Schools in Kenya (A Case of Kakamega County)

Okutoyi Joel¹, Kochung J. Edward¹ and Mbagaya V. Catherine²

¹Department of special needs education, Maseno University, P. O Box Private Bag, Maseno

²Department of Educational Psychology, Maseno University, P.O Box Private Bag, Maseno

Corresponding Author's E-mail: joelokutoyi@ gmail. com

Abstract

Stuttering is characterized by repetitions, prolongations, interjections, hesitations and blocks. The prevalence of Persons who Stutter (PWS) in Kenya is 440,000. Kakamega county has a prevalence of 12,000 PWS, of which 4,400 are schools going age children. Between the years 2010 to 2013, a total of 138 Learners who Stutter (LWS) were assessed and placed in primary schools in Kakamega County. Reports from baseline survey (2014/2015) across primary schools in Kakamega County indicated that LWS performed poorly as they were found in last quarter of the class in examinations. Stuttering has effects such as anxiety, stigma, fear, frustrations and embarrassment to the LWS while speaking. However, the extent to which these effects of stuttering occur in Kakamega is unknown. The purpose of the study was to find out effects of stuttering among LWS. The objective of study was to; establish effects of stuttering among LWS in primary schools and determine the extent to which effects of stuttering occur among LWS in primary schools. The study employed descriptive survey research design. The target population consisted of 84 LWS. Saturated sampling technique was used to select 76 LWS. An instrument of data collection was questionnaire. Validity of the instruments was established using face and content validity. Reliability of the instruments was established through test-retest method. Pearson correlation was used to calculate the coefficient of correlation, where reliability was accepted at 0.7 and above. Reliability for questionnaire of LWS was 0.885. Quantitative data was analyzed using mean. Findings indicated that the extent to which stuttering effects occurred among LWS were as follows; fear to speak (M= 4.5421), frustrations while speaking (M= 4.4507), anxiety to speak (M= 4.3402), embarrassment while speaking (M= 4.30621) and stigma as a result of stuttering (M= 4.2305). The overall extent to which stuttering effects occurred among LWS was to a large extent (mean= 4.37). This implied stuttering effects occurred at a large extent among LWS. Therefore, LWS experience stuttering effects such as anxiety, fear, frustrations, self-stigma and embarrassment while speaking occurred to a large extent. The study recommends that Stuttering effects such as anxiety, fear, frustrations, self-stigma and embarrassment need to be minimized for the learner to achieve in school. Such effects can be minimized through sensitization of other learners and teachers to accept the way LWS speaks. Findings of this study were significant to LWS, teachers, regular learners to understand how effects of stuttering affect LWS in schools.

Key words: effects of stuttering, classroom participation, learner who stutter.

BACKGROUND

Spiller (2011) observed that certain dysfluencies are considered more characteristic of stuttering than of normal speech and these dysfluencies are often referred to as the core stuttering behaviors. The three classic core stuttering behaviors are part word repetitions, prolongations, and blocks. Others include; interjections and hesitations (Ogutu, 2005).

Part word repetitions means the person repeats a syllable or small part of a word rather than repeating the entire word (e.g. wa-wa-water). Prolongations involve holding on to a sound, such as "sssssalt." Prolongations have audible sound, as opposed to blocks, which are usually inaudible (Spiller, 2011 and Saidie, 2011). Blocks are sometimes called "silent posturing" because during the block when no sound comes out, the person usually has their mouth set for the sound that they want to say. All three of these behaviors are considered "intra-morphic" or within word. They disrupt the integrity of a word (Rind and Rind, 2008).

The PWS knows what they want to say, they have their message together and have the word ready. Stuttering dysfluencies happen because something has gone temporarily wrong with the connection between the brain and the speech muscles. The PWS cannot move from one sound to the next freely and smoothly. These

dysfluencies are involuntary and do not serve a conversational purpose in the way normal dysfluencies do (Spiller, 2011).

Scott (2009) noted the following effects of stuttering among LWS in U.S.A; Scott (2009), observed that, "At one extreme is the child who is unconcerned and happy to participate because he doesn't have any negative feelings associated with talking. At the other extreme is the child who will cry and refuse to talk as he or she feels frustrated, anxious, embarrassed, or even ashamed" (Scott, 2009). Anxiety may increase if other students around them answer the teacher's questions with no problem or hesitation.

Rind and Rind (2008) in the U.S.A indicated the following warning symptoms of stuttering in the classroom: repetition of the first syllable or letter of words, stretching out sounds, forcing words to come out, blocked airflow while answering questions in class, tremors and avoid participating in the classroom. They further noted that a child who experiences dysfluency frequently finds himself at a serious disadvantage at home and at school during play. Often teachers face a multiplicity of problems in dealing with such learners because they are not experts in every area of the child's development.

PWS are often stigmatized by society. They are unfairly stereotyped into a group which is often believed to be less intelligent or capable than the average individual (Blood and Blood, 2003). As a result, PWS often have impaired self-image, as well as negative attitudes and feelings in regard to their ability to communicate. This results to self-stigma (Blood and Blood, 2003).

Adolescents and young adults who stutter usually deal with anxiety which can increase stuttering behavior (Davis, 2006). Stuttering has a negative social effect. It is important for Speech-Language Pathologists (SLPs) to be fully informed about challenges that PWS face due to their dysfluencies. Davis et al. The extent to which anxiety occurs among LWS in Kakamega County was unknown.

Lesser (2011) noted that LWS in England faced difficulties such as blockage of speech when speaking fast, difficulties in articulation of syllables, words and sentences. She further noted that stress can worsen the speech disorder due to constant fear. She also observed that having to speak in front of a crowd on a microphone was the worst as the child may have total blockage, hence unable to speak any word (Lesser, 2011).

Kraaimaat, Martine and Rien (2002) carried out a study to find out the presence of social anxiety in adults who stutter. This was done by administering the Inventory of Interpersonal Situations (IIS) test, a social anxiety inventory to a group of 89 people who stuttered and 131 people who did not stutter. Two components of social anxiety were measured by the ISS, the extent to which emotional tension or discomfort was perceived in social situations and frequency with which social responses were executed. Persons who stutter displayed significantly higher levels of emotional tension or discomfort in social situations. They also reported a significant lower frequency of social responses compared to non-stuttering peers. Nevertheless, 50% of the scores of PWS fell within the range of a group of highly socially anxious psychiatric patients. It was concluded, that adults who stutter differ from adults who do not stutter as far as negative emotional experience of social situations (discomfort) and responses to them (frequency) are concerned. Such differences were not related to positive self-esteem. The differences in social anxiety of adults who do and do not stutter might be the result of an inherent link between stuttering and social anxiety. Secondly, it was concluded that there was a subgroup of adults who stuttered with relatively high social anxiety levels (Kraaimaat et al., 2002). There was also evidence that PWS were more likely to suffer from anxiety (Craig et al., 2003; Blood et al., 2007 and Milcahy et al., 2008).

Aslam (2013) observed that stuttering leads the individual to feel a range of negative effects such as frustrations after blockage and repetitions, embarrassment, self stigma as a result of negative attitude from other people, making the person to withdraw from others. In addition, Aslam (2013) found out those persons who stutter reported higher anxiety, feared to speak in a family set up. Long term stuttering may leave the person more vulnerable to become socially anxious as the person anticipates to stutter in any speaking situation.

Kraaimaat et al. (2002) study focused on social anxiety among PWS, the extent to which anxiety as an effect of stuttering occurs among PWS was unknown. There was need to find out the extent to which anxiety occur among LWS in Kakamega county. Aslam (2013) focused on negative effects of stuttering on the person who stutter. However, the extent to which the effects of stuttering occur among adolescence LWS in primary schools was unknown. Secondly, the present study sought to find out how anxiety as an effect of stuttering influenced educational achievement among LWS in primary schools in Kakamega County.

Ogutu (2005) observed the following problems experienced by Children who Stutter (CWS) in Kenya: repeating sound in words, prolongation of sound in words, hesitation between words, tendency to avoid words that contain sounds that child cannot pronounce with ease. Ogutu (2005) further asserted that CWS accompany pronunciation with unusual facial expressions, need more time to pronounce a word, tend to stutter more when he is angry, excited, speaking to a person with authority or when under pressure as a result of anxiety to speak. However, Ogutu's paper was not an empirical research on stuttering, but views. There was need to carry out an empirical study on stuttering in Kenya.

A review of literature on stuttering indicated a few empirical researches had been carried out in Africa, and hardly any in Kenya. The extent to which the stuttering effects occurred among LWS was unknown. Previous studies revealed stuttering had effects such as anxiety, stigma, fear, frustrations and embarrassment to the LWS while speaking. However, the extent to which these stuttering effects occurred among LWS in Kakamega was unknown. Therefore the present study was carried out to establish the extent to which stuttering effects occurred among LWS. Objectives were; to find out stuttering effects among learners who stutter in primary schools in Kenya, and to determine the extent to which stuttering effects occurred among LWS in primary schools in Kenya.

RESEARCH METHODOLOGY

The study employed descriptive survey research design. Descriptive survey design was used to find out the classroom participation status among LWS. Correlational design was used in this study to find out the relationship between effects of stuttering on classroom participation among LWS. The study was carried out in 20 regular primary schools in Kakamega County. The target population consisting of 84 learners who stutter in class six, seven and eight were involved in the study. Saturated sampling technique was used to select 76 learners who stutter in class six, seven and eight, 108 teachers and 18 head-teachers. Saturated sampling technique ensured all participants take part in the study, because the population of learners who stutter, teachers and head teachers is small. The technique ensured all categories of population presented were included in the sample (Best and Kahn, 2006).

Table 6: Target Population and Sample Size

Category Of Respondents	N	Sample size (n)	%
Learners who Stutter	84	76	90

N-Target population, **%**-percentage of sample size.

The study used questionnaire as the instrument of data collection. Content validity was used to establish the accuracy of the research instruments on extent to which the effects of stuttering occur among LWS. Content validity was established by presenting the research instruments to experts from Special Needs Education department, Maseno University, who are conversant in content on stuttering, to ascertain. The experts judged the instruments independently to ensure that all the content on each test item addressed specific objective was addressed. The experts made recommendations on each section testing each objective. Later, corrections were made based on recommendations before the instruments were used in the field. The reliability of the research instruments was established using test-retest method through a pilot study. For pilot study, ten percent of the study population was selected; where 8 learners who stutter. Reliability for the questionnaire for learners who stutter was 0.89. Necessary corrections were to be made on the research instruments before being administered to the respondents. However, the population used for pilot study was not used in the actual study. For data analysis, quantitative data collected from the questionnaires was coded manually, entered into SPSS data sheet before analyzing it using the Statistical Package for Social Sciences (SPSS) – 16.0 versions. Later, data was analysed using means. Results were presented using tables.

In coding and interpretation of the questionnaires from LWS and regular learners, the positively stated items from closed ended questionnaire were coded with each of the five points rating scale being given: Always (A) - 5 points, Very Often (VO)- 4 points, Often (O)- 3 points, Rare (R) - 2 points, Not at All (NA) - 1 point. For those statements that were negative, reverse coding was employed in order to find the desired results, where Always (A)- 1 point, Very Often (VO)- 2 points, Often (O)- 3 points, Rare- 4 points, Not at All (NA)- 5 points. Means were established on the extent to which effects of stuttering occur among LWS in Kakamega County were run using SPSS. In the interpretation of scores, a mean score of above 3.0 indicated a positive influence, while a mean score of 3.0 implied a neutral influence, while a mean score of below 3.0 implied a negative influence.

RESULTS AND DISCUSSIONS

Objective One: Extent to which Stuttering Effects occur Among Learners Who Stutter in Kakamega County

This section presents results and discussions on data, on the extent to which effects of stuttering occur among learners who stutter in regular primary schools in Kakamega County. The data was collected using a questionnaire; Learners were asked to respond to the extent to which they felt that the effects of stuttering occurred in specific situations. They were expected to select from a rating scale ranging from “Not at all” (1) to “Always” (5). It was coded, analyzed using means. The results were presented in table 6.

Table 6: Extent to which Stuttering Effects occur among LWS (n=76 LWS)

Statement	M
Anxiety	
I am depressed when talking	4.17
I find difficulty speaking to unfamiliar person	4.51
LWS experience difficulty speaking to large crowds	4.43
LWS tremble while speaking	4.24
Mean anxiety	4.34
Fear	
I fear speaking in class	4.62
I fear speaking because I get stuck on a word for a long time	4.45
I fear speaking to a large group as I stutter more	4.39
I fear talking because I prolong words and sentences while answering a question in class	4.57
I fear speaking because I hesitate a lot while at school	4.68
Mean fear	4.54
Frustrations while speaking	
I get frustrated while speaking	4.54
I experience frustrations in class when I repeat syllables and words while talking	4.57
Sometimes I get frustrated when I prolong words and sentences when talking at school	4.43
I get frustrated when I get interject some syllables to a word in order to speak well	4.26
Mean frustrations	4.45
Self-Stigma	
I avoid other learners who laugh at me	4.74
I avoid engaging in verbal activities with some teachers and other learners while in class.	4.16
I do not seek to be with other learners while at school	4.22
I withdraw from other learners in verbal activities at school	3.80
Mean stigma	4.23
Embarrassment among LWS	
I am embarrassed while speaking because other learners tease me when I speak	4.29
I am embarrassed while speaking because I have difficulties in speaking well	4.58
I am embarrassed because other learners ridicule me on every word I get stuck when I speak at school	4.60
Other learners laugh at the way I speak	3.75
Mean embarrassment	4.31
Overall mean on stuttering effects	4.37

Key: M- mean, **Very large extent** – 4.5 to 5.0, **Large Extent-** 3.5 to 4.4, **small extent-** 2.5 to 3.4, **Very Small Extent-** 0 to 2.4

Table six shows the extent to which various effects of stuttering occur among LWS in Kakamega County. Average means for each effect are provided in table 6. Fear was the highest rated effect of stuttering ($M = 4.54$), followed by frustrations ($M = 4.45$), anxiety ($M = 4.34$), embarrassment while speaking ($M = 4.31$) and least rated was self-stigma ($M = 4.23$). Thus, the highest rated effect was fear to speak and least rated was stigma. The total mean rating on extent to which effects of stuttering occur among LWS in Kakamega County was 4.37. In addition, all the five effects of stuttering occurred to a large extent among LWS in Kakamega County.

Findings of this study concur with findings by Lesser (2011) who indicated that LWS had worst experience of anxiety when called to speak in front of a crowd on a microphone. Learners experienced the worst total blockage, hence were unable to speak any word as a result of anxiety and anticipation of stuttering (Lesser, 2011). In the present study, LWS reported experiencing similar difficulties related to anxiety ($M = 4.34$) and embarrassment ($M = 4.31$) when speaking.

In addition, the current study found concurrence with the findings by Langevin & Hagler (2004), Blood & Blood (2004), Blood and Blood (2007), who reported that adolescents, who stutter, are more likely to be teased or bullied at school. In the present study, self-stigma ($M = 4.23$) among LWS was rated highly by a majority of respondents as one of the effects of stuttering. It should be noted that bullying is one way in which stigma manifests itself. The main reason for bullying is to ultimately stigmatize the victim. In turn the victim internalizes the victimization and develops self-stigma in verbal activities likely to be bullied or teased. In this way, the current study bears similarities with studies by Langevin & Hagler (2004), Blood & Blood (2004), Blood and Blood (2007) and Hughes et al. (2010) who noted that LWS were stigmatized and discriminated. In spite of the similarities between the present studies with the previous authors, the studies differed in sample. Hughes et al. (2010) study used non-stuttering learners who assumed stuttering condition; thus his results were based on perceptions, whereas the present study used 76 LWS, 329 regular learners and 108 teachers as respondents, thus the results of the present study were more valid and factual than the results from Hughes et al. (2010) who used only one group of respondents. It is worth noting that the effect of self-stigma among learners who stutter is manifested in various forms such as avoiding to get involved in verbal activities where he is likely to be discriminated, teased or bullied. Self-stigma arises among LWS because the learner undergoes painful experiences when he is bullied, teased and discriminated. As a result, the LWS develops negative perception towards himself in most speaking situations leading to self-stigma.

The extent to which anxiety occurred among LWS in the present study was rated at a large extent (Mean = 4.3402). These findings were in agreement with Kraaimaat et al. (2002) who indicated that PWS are more likely to experience social anxiety than PWDS. Although it is difficult to compare the present study with Kraaimaat et al. (2002), it is worth noting that anxiety is experienced by both age groups; adolescents and adults who stutter. The anxiety LWS experienced was as a result of anticipation of stuttering due to self-consciousness.

The findings of the present study concurred with Aslam (2013) who observed that persons who stutter experience negative effects such as frustrations, embarrassment, self-stigma, anxiety and fear as a result of stuttering. In the present study, findings indicated that the extent to which effects of stuttering occur among LWS was to a large extent ($M = 4.37$) among adolescent LWS in regular schools. It is important to note that both the present study and Aslam (2013) were related on effects of stuttering. However, the present study occurred in a primary school set up, unlike Aslam (2013) study which was carried in a family set up. Thus, the extent to which the effects of stuttering occurred among LWS and persons who stutter both at home and school was large. This implied that the effects of stuttering such as fear, anxiety, embarrassment, frustrations and self-stigma are likely to influence activities of PWS both at school and home.

CONCLUSIONS

The extent to which stuttering effects occurred among LWS were as follows; fear to speak ($M = 4.5421$), frustrations while speaking ($M = 4.4507$), anxiety to speak ($M = 4.3402$), embarrassment while speaking ($M = 4.30621$) and stigma as a result of stuttering ($M = 4.2305$). The overall extent to which stuttering effects occurred among LWS in Kakamega County was to a large extent (mean = 4.37). This implied stuttering effects occurred at a large extent among LWS. Therefore, LWS in Kakamega County experienced stuttering effects such as anxiety, fear, frustrations, self-stigma and embarrassment while speaking occurred to a large extent.

RECOMMENDATIONS

Based on findings of the study, the study recommends that; Stuttering effects such as anxiety, fear, frustrations, self-stigma and embarrassment need to be minimized for the learner to achieve in school. Such effects can be minimized through sensitization of other learners and teachers to accept the way LWS speaks.

REFERENCES

- American Speech-Language-Hearing Association. Stuttering. Retrieved June 25, 2009 from <http://www.asha.org/public/speech/disorders/stuttering.htm>
- Best, J. & Kahn, T. (2006). *Research Methods: Qualitative and Quantitative Approaches*. Nairobi: Longman Publishers. Kenya.
- Blood, G.W. & Blood, I.M. (2004). "Bullying in Adolescents who stutter: Communicative Competence and Self-Esteem." *Contemporary Issues in Communication Science and Disorders: 31, 69–79*.
- Blood, G. W. & Blood, I.M. (2007). "Preliminary Study of Self-Reported Experience of Physical Aggression and Bullying of Boys who stutter: Relation to Increased Anxiety." *Perceptual and Motor Skills;104 (3);1060–1066*.
- Bloodstein, O.& Berstein, N. (2008)..*A Handbook on Stuttering, 6th Ed. Clifton Park, NJ:Thomson Delmer Learning*.
- Brian, O., Jones, M., Packman, A., Menzies, R., and Oslow, M. (2011).Stuttering Severity and Educational Attainment. *Journal of Fluency Disorders; 36 (2): 86-92*.
- British Stammering Association, (2005).People who Stammer Find their Voices in the Scottish Parliament: the Scottish Parliament Equal Opportunities Committee Disability Inquiry.
- Butter, T. & Clare, S. (2013). "University?...Hello No: Stammering through Education. *International Journal of Educational Research, 59; 57-65*.
- Craig,A.R.(1990).An Investigation into the Relationship between Anxiety and Stuttering. *Journal of Speech and Hearing Disorders, 55,290–294*.
- Craig,A., Hancock, K., and Tran, Y. (2003).Anxiety Levels in People who Stutter. A Randomized Population Study. *Journal of Speech, Language and Hearing Research, 46 (1), 1197–1206*.
- Davis, S., Howell, P. & Cooke, F. (2002). Sociodynamic Relationships between Children who Stutter and their Non-stuttering Classmates. *Journal of Child Psychology and Psychiatry, 43,939–947*.
- District Education Offices Reports (2013). Unpublished Reports on Learners with Speech Difficulties, Kakamega County.
- Dorsey, Michelle and Guenther.K.R.(2000). "Attitudes of Professors and Students toward College Students Who Stutter." *Journal of Fluency Disorders, Vol. 25, No. 1, pp. 77-83*.
- Dambudzo, I.I & Schulze, S. (2011). Does the Physical Self-Concept Make a Difference to Academic Achievement? Investigating the Role of Physical Self-Concept on Academic Achievement of Adolescent Learners in Zimbabwe Secondary Schools. *Greener Journal of Education Research; 3(1), 7-22*.
- Dyke, D. C., & Holte, L. (2003).Communication Disorders in Children. *Pediatric Annals, 32 (7): 436*.
- Ezrati-Vinacour, R. & Levin, I. (2004). The Relationship between Anxiety and Stuttering: A Multidimensional Approach. *Journal of Fluency Disorders, 29,135–148*.
- Faust, R. A. (2003). Childhood Voice Disorders: Ambulatory Evaluation and Operative Diagnosis. *Clinical Pediatrics, 42, 1–9*.
- Gabel, R.M., Colcord, R.D.& Petrosino, L. (2002). Reported Anxiety of Adults who do and Do Not Stutter. *Perceptual and Motor Skills, 94,775–784*.
- Gabel, R.M, Hughes, S. & Daniels, D. (2008). Effects of Stuttering Severity and Therapy Involvement on Role Entrapment of Persons who Stutter. Elsevier: *Journal of Communication Disorders 41 (2008), 146-158*. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0021992407000548> on November 11, 2015 at 9.54 a.m.
- Gabel, R. M., Blood, G.W., Tellis, G. M. & Althouse, M. T. (2004). Measuring Role Entrapment of People who Stutter. *Journal of Fluency Disorders, 29 (1); 27–49*.
- Hill, S. (2005, July 2). *Stuttering and Its Effects*. Retrieved from <http://ezinearticles.com/?Stuttering-And-Its-Effects&id=48045>.
- Hughes, S., Gabel, R., Irani, F. & Schlagheck, A. (2010).University Students Perceptions of the Life Effects of Stuttering. *Journal of Communication Disorders*. Elsevier; 43 (1).Pp.45-60.
- Jaan, P. (2011). Stuttering has Social Consequences. Canadian Stuttering Association. Retrieved from <http://www.stutter.ca/article/research-article-summary> on April 28, 2013 at 3.00 P.M.
- Langevin, M., & Hagler, P.(2004).Development of a Scale to Measure Peer Attitude toward Children Who Stutter. In *Evidence-Based Treatment of Stuttering. Empirical Issues and Clinical Implications* (ed. A. K. Bothe), pp.139–171.Mahwah, NJ:Lawrence Erlbaum Associates.
- Karass, J., Walden, T.A, Conture, E.G, Graham, C.G, Hayley, S.A, Hartfield, K.N & Krista, A.S. (2006). Relation of Emotional reactivity & Regulation to Childhood Stuttering. *Journal of Communication Disorders, 2006; 39 (6); 402- 423*.
- Klein, J.F & Hood, S.B. (2004). The Impact of Stuttering on Employment Opportunities and Job-performance. *Journal of Fluency Disorders, 29; 255-273*.

- Klompas, M. & Ross, E. (2004). Life Experiences of People who Stutter, and the perceived Impact of Stuttering on Quality of Life: Personal Accounts of South African Individuals. *Journal of Fluency Disorders*, 29, 275-305.
- Langevin, T., Marilyn, N. & Hagler, P. (2004). "Development of a Scale to Measure Peer Attitude toward Children who Stutter." In Evidence-Based Treatment of Stuttering. Empirical Issues and Clinical Implications (ed. A. K. Bothe), pp. 139–171. Mahwah, NJ: Lawrence Erlbaum Associates.
- Ogutu, T.A. (2005). *Children with Stammering Problems*. Kenya Institute of Special Needs Education. Nairobi: KISE Printing House.
- Rees, D.I & Sabia, J.J. (2011). The Kids Speech: The Effect of Stuttering on Human Capitation Acquisition. Republic of Kenya, (2007).National Survey on Persons with Disabilities. Ministry of Planning, National Development and Vision 2030. Nairobi: Government Printers.
- Republic of Kenya, (2009).National Population and Settlement Census Report. Ministry of Planning, National Development and Vision 2030. Nairobi: Government Printers.
- Saraswarthy, R., Myers, J.A (2009). Types of Speech and Language Disorders. Retrieved from <http://www.extension.purdue.edu/providerparent/child%20growth-development/typespeechlangdiso.htm> on September 20, 2013 at 12.56 p.m.
- Scott, L. (2009). Helping stutterers. *Education Digest*, Retrieved from <http://www.eddigest.html/contentsapr09.html>
- Schneider, D. J. (2005). *The Psychology of Stereotyping*. New York: Guilford Press.
- Spillers, C.S. (2011). Effects of Stuttering on the Individual. Retrieved from www.d.umn.edu/cspiller/stutteringpage/effects.htm.

Cite this Article: Okutoyi J, Kochung JE and Mbagaya VC (2016). Extent Stuttering Effects Occur Among Learners Who Stutter in Primary Schools in Kenya (A Case of Kakamega County). *Greener Journal of Educational Research*, 6(6): 223-229, <http://doi.org/10.15580/GJER.2016.6.051916092>