The Relationship Between Teachers' Control Behaviour and Primary School Pupils' Achievement in Mathematics in Kenya

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Abstract- ***Achievement in Mathematics in relation to other subjects has been a challenge to many pupils at primary and secondary school levels. There are many factors attributed to pupils' achievement in Mathematics examination such as: school related factors, pupils related factors, subject related factors and teacher related factors. This study set out to determine the relationship between teachers' control behavior and pupils' aachievement in Mathematics by class eight pupils in public primary schools in Vihiga sub-county in Vihiga County, Kenya. The objective of the study was to investigate the relationship between teachers' control behaviour and primary school pupils' achievement in Mathematics in Vihiga sub-county. The 2020 K.C.P.E. exam Mathematics' scores were used as a measure of teachers' contribution towards pupils' academic achievement. The study was conducted through causal comparative research design. All 31 Mathematics teachers of 2020, class 8 public primary schools in Vihiga sub-county formed the target population. The study employed purposive sampling procedures. All the 31 Mathematics teachers from public primary schools in Vihiga sub-county constituted the sample. Data was collected using a Mathematics teachers' questionnaire generated by the researcher and administered personally. Reliability of the questionnaire was ensured by Cronbach's alpha and a coefficient of alpha*** > 0.7 ***was reported. A Pilot study was first carried out in three of the schools outside the study sample. Mathematics educators reviewed the instrument for content, face and construct validity and found it valid. Data on achievement was translated to frequency counts and percentages which were presented in contingency tables. The chi square statistic was used to establish the relationship between teachers' control behavior and its contribution to pupils' achievement in Mathematics at a significant level of 0.05. The findings of the study showed that there was a statistically significant relationship between teacher's control behaviour and pupil's achievement in Mathematics. The findings of the study were significant since they provided empirical data which formed the basis of reference for Mathematics educators and teachers interested in teacher's control behavior and its influence on Mathematics performance in primary schools in Kenya. It was recommended that programmes that can boost teachers' control behaviour be improved in schools since its contribution to pupils' achievement in Mathematics is profound.***

Indexed Terms- ***Control behavior, contribution, Mathematics achievement, Primary schools.***

I. INTRODUCTION

The school system empowers the students with necessary knowledge and skills for proper living in the society. It is expected that classroom learning be translated into solving problems in real life situation (UNESCO, 2006). In Kenya, most people in our society recognize and appreciate the essential role of Mathematics in everyday life,although it remains one of the poorly performed subjects in KCSE national examinations (Ongeri, 2012). Available data indicates that Mathematics performance in Kenya among primary school pupils has persistently been low over the years at school, sub-county and national level. According to Ramani (2004) and Siringi (2005) performance in Mathematics has generally been poor in Kenyan schools. Njoroge (2004) also decries the poor performance in Mathematics despite the fact that it is one of the key subjects expected to turn Kenya into an industrialized country by the year 2020. Darling – Hammond (2009) contends that measures of

teacher quality are more strongly related to student achievement, than other kinds of investment, including reduced class sizes, overall spending on education and teacher salary.

II. THEORETICAL FRAMEWORK AND LITERATURE REVIEW.

2.1 THEORETICAL FRAMEWORK

The study was informed by the Modern Expectancy – Value Theory by Wigfield and Eccles (2000). Expectancy Value theory associates academic achievement, persistence and choice most directly to person's expectancy related and task value beliefs. Choices are assumed to be influenced by both negative and positive tasks characteristics and all choices have costs related with them precisely since one choice eliminates other options in this model (Wigfield & Eccles, 2000). Motivation being a construct that is multidimensional, researchers in the field of motivation concur that anyone engaging in any learning situation do ask himself or herself three basic questions of Can he/she do a given task?, Does she/he wish to do the task and why?, and what does she/he need to do to be successful in the task? (Wigfield & Eccles, 2000).

Theorists in expectancy –value theory point of view believe that individuals option, determination and performance can be well explained depending on their beliefs about how well they will do a task and the extent to which they value the task they are to perform (Wigfield & Eccles, 2000). The theory proposed three motivational beliefs components namely: an expectancy component which deals with students' beliefs in capability of carrying out a task (self-efficacy), value part that involve learners' goals and beliefs about the importance of the task and the cost/affective component which involves students' emotional reaction to the task that is, interest and test anxiety (Wigfield & Eccles, 2000).

Expectancy components deals with students' self-efficacy believes and this is where learners answer the questions of the kind "Can I do this task?" Expectancy aimed at success is parson's way of life about how well he/she will perform future task (Eccles et al., 1983). Schunk (1991) showed that perceived self-efficacy affects many aspects of student motivation including their choice, effort and persistence for a task.

Value factor involve learners' goals and thinking about the significance or importance of the undertaking. It involves students' reasons for engaging in a particular task. It is a motivational construct associated with the question "why do I do this task and do I need to do it?" and this involves both intrinsic and extrinsic motivation beliefs and task value (Wigfield & Eccles, 2000). Intrinsic value is the pleasure a learner gets from doing a task or the subjective interest the learner has in the task. Intrinsically motivated learners engage in a task for the reason that they find it pleasant and therefore they learn because they are curious about the content in the subject and they feel challenged when learning activities involved in the subject. Conversely students can also be extrinsically motivated hence engaging in a task by believing that working on a task results desirable outcome for example reward, approval by others, good grade, better career and punishment avoidance. Ryan and Deci (2000) argue that intrinsic motivation generally results to more cognitive engagement in comparison to extrinsic motivation. The other important aspect of value component is the task value which is defined as the subjective task values as incentives for doing different tasks (Wigfield & Eccles, 2000) and they include interest in the task, its importance to individuals and its utility. The current study focused control behaviour.In learning environment one of the most important aspects of affective or emotional constructs are interest and test anxiety (Wingfield & Eccles, 2000). Just as in the present study, researchers using the expectancy –value theory are interested in how different aspects of an individual's valuing of academic tasks together with the individuals expectancies for success contribute to achievement (DE Backer &Nelson, 1999). Wigfield and Eccles (2000) posited that competency –related beliefs and value should become related to one another.

Expectancy-value theory shows how different aspects of an individual's valuing of academic tasks together with the individuals expectancies and affective beliefs contribute to academic achievement. The theory is therefore found relevant for the current study to be embedded on, for it encompasses all the constructs of motivation one of which the study focuses on. The

relationship between teachers' control behaviour and Mathematics achievement.

2.2 LITERATURE REVIEW

A study conducted in Malaysia by Zanaton and Vijaya (2012) was to establish the extent to which learning styles and intrinsic motivation influenced learning of mathematics. Survey research method was used to carry out the research using a total sample of 78 students from two departments in National Advanced Youth Skill Training Institute of Sepang (IKTBNS). Data was collected using Inventory of Learning instrument had four learning styles and three types of intrinsic motivations which are practiced by the students in learning mathematics. Data collected was analyzed descriptively and inferentially using the SPSS package. Result from the descriptive analysis found that the students showed high learning style. Inferential analysis results found a significant relationship between hard work learning styles and academic achievement. The reviewed study was on achievement in mathematics among students in a training institute unlike the present that focused on Mathematics among primary school pupils.

Akhtar, Iqbal and Ahmed (2017) in India conducted a study to establish relationship between teacher motivation and students' academic achievement at secondary school level. A total sample of 950 secondary school teachers using population proportionate to sample technique was taken out of 3168 secondary school teachers teaching in high schools of five districts of Lahore Division in Punjab. Survey technique was used to collect data through a questionnaire Motivational Orientation for Teaching Survey (MOT-SIII). The academic achievement of the students was measured by taking two year results of grade 10 students in the annual examinations conducted by Board of Intermediate and Secondary Education Lahore (BISE). Data was analyzed both descriptively and inferentially using mean, standard deviation and Pearson Product Moment correlation. It was found that intrinsic motivation of teachers had a strong correlation with academic achievement of the students.This study was done in secondary schools while the current study was done in primary schools.

Research has shown that teacher behavior may be a powerful influence on student behavior (Birch& Ladd, 1997, Bandura1997, Bloom, 1976.). For this study teachers' behaviors may be positive or negative or disapproving. Teachers who possess positive behavior qualities make use of praise and empathy in the classroom. The term 'praise' comes from a Latin word 'pritiare' this means to value highly. (Fisher, 2002). 'Cultivating a healthy classroom', implies that 'healthy oral, facial and body expressions set the tone that facilitate emotionally stable and eager learners'. Negative behavior qualities of teachers result in reprimanding and use of disapproving remarks in classrooms. Reprimanding is "defined as verbal or non verbal behaviors reflecting hostility or negative feelings of the teacher including negative feelings of the teacher evaluation of the student behavior, expressing anger or criticism (Fisher,2002)".Students also view attitudes that are strict and coercive to be negative . Reprimanding directions diminish students' self-confidence and illustrate negative teacher behavior (Gibbons, Kimmel & O'Shea, 1997).

Teacher control behavior may be determined by the teachers' level of job satisfaction and is closely linked to organizational citizenship behavior. Organizational citizenship behaviors' consist of four objectives. (Borman & Motowidlo, 1993). Organizational citizenship behaviors involve improving the welfare of another person (Borman, 2004). It also entails behavior that benefits the organization that goes beyond existing role expectations dimensions: - enthusiasm, assistance to others, rule and prescribed procedure following and openly defending the organization (Organ, Podsakoff, MacKenzie, 2006).

Research indicates that individuals who often engage in organizational citizenship behavior do indeed receive more positive performance evaluations (Allen & Rush 1998). In addition, these individuals are more inclined to receive additional rewards as a consequence of these associations (Allen & Rush, 1998).To achieve organizational citizenship behavior, individuals must be motivated. The perceived motivation of these individuals could translate to more positive performance appraisals (Shore, Baksdale, and Shore, 1995). Individuals who engage in organizational citizenship behavior are more inclined to be liked by other individuals and this often translates to more positive evaluations. (Lefkowitz, 2000). Organizational citizenship behaviors might promote positive emotions and feeling, including

morale and cohesion (Podsakoff, Mackenzie, Paine & Bachrach 2000).

Many factors within classrooms can affect students academic and social motivation, the role of climate is significant. An important factor linked to the climate is the teachers' control orientations whether they believe that children should be controlled or be given freedom to make decision determine the structure of the classrooms which in turn affect students' motive to learn. It is argued that teachers' orientations translate into teachers' behaviour which students can readily perceive. (Deci, & Ryan, 1985). When they perceive that their teachers care about them or listen to them, their motive to learn and efforts to behave in socially appropriate ways is enhanced.

In this study teachers control orientations were defined by two constructs- autonomy versus control and humanistic versus authoritarian. The concept of teachers' autonomy versus control orientation grew from cognitive evaluation theory (Deci & Ryan, 1985) which argues that adults tend to have a general orientation towards dealing with children that can be viewed as ranging from supporting the children's autonomy to controlling the children's behaviour. Teachers who motivate behaviour through the use of external controls as rewards and comparisons are considered controlling whereas those who sought to minimize salient external controls and instead attempt to take the students internal frame of reference with respect to problems, ideas and initiatives are considered as autonomy supportive.

There are four categories of the teachers control versus autonomy construct: highly control, moderate control, moderate autonomous and highly autonomous. The highly controlling teacher identifies a solution and uses tangible extrinsic motivators or sanctions to ensure that his or her solutions are implemented. The moderate controlling teacher identifies a solution and encourages its implementation by appealing to the child's internalized sense of obligation ("do what you should") to what others think is right ("its for your own good"). The moderately autonomy teacher encourages the child to use social comparison information which emphasizes understanding how his or her peers diagnose and solve same problem. The highly autonomy supportive teacher encourages the child to diagnose his or her own problem, generate a solution and try it out for himself or herself.

The second aspect of teacher orientation is pupil control orientation whether it is humanistic or authoritarian. From a humanistic orientation, the school is viewed as an educational community in which students learn through cooperate interaction and experience. In this model, learning and behaviour are viewed in psychological and sociological terms, not moralistic terms. This orientation stresses the importance of individuality of each student and the creation of atmosphere to meet a wide range of students needs (Agne, Greenwood & Millar, 1994) Educators classified as humanistic are patient, congenial, and easily approached by students. They are responsive to students' suggestions and ideas and encourage pupils self discipline and independence.

In contrast to humanitarian orientation, "the model of (authoritarian) orientation depicts a classroom atmosphere with a rigid and highly controlling setting concerned primarily with the maintenance of order (Hoy, 2000). In this model behaviour is viewed as personal affront and students are perceived as persons who must be controlled through the application of punitive sanctions. Authoritarian educators manifest suspicion and distrust of pupils, often addressing them in an unpleasant and angry manner. They react personally and judgmentally towards students who misbehave (Lunenbrick & Pintrich, 2002).From the perspective of teachers' orientation towards a caring relationships, studies revealed that the classroom with humanistic teachers orientations as compared with classroom with authoritarian teachers orientations had students who had higher satisfaction with school, higher commitment to class work, more positive attitude towards teachers (Lunenbrick &Pintrich,2002) .Research has shown that perceived teacher humanistic behaviour has an effect on students intrinsic motivation and hence pupils achievement(Deci & Ryan, 1994).

In a research paper by Selina Akhter, Research centre for interventions in teaching and learning, school of Education, University of Auckland, she concludes that there is a significant relationship between authoritarian behavior of teachers and students'

intrinsic motivation and social responsibility goals raise an important issue concerning the role of social climate of the classroom in explaining motivation of students. This findings support the theory that caring and humanistic classroom climate enhances students' social motivation. (Selina, 2003).

A study conducted by Yara (2009) at Kampala International University Western Campus on the Topic "Relationship between Teachers attitude and students Academic Achievement in Mathematics in some selected senior secondary schools in Southern Nigeria." Found that there is a relationship among teachers attitude and students academic achievement in secondary school Mathematics. In his paper attitude as a concept is concerned with an individual way of thinking, acting and behaving. According to Yara, (2009), the behaviour of a teacher as they interact with students is more paramount than what they teach. He concludes that students' positive attitude towards science could be enhanced by teachers' enthusiasm, resourcefulness and helpful behavior, teachers' thorough knowledge of the subject matter and their making science quite interesting. All these are applicable to Mathematics since Mathematics is regarded as the language of science. Gangoli cited in Igwe (1985) stipulates that for teaching and learning of science to be interesting and stimulating, there has to be motivation on the part of both the teacher and the learner so as to ensure the development of positive attitude and subsequently maximum academic achievement. Okpala, (1985) found that the effect of teachers attitude towards assessment practices on students achievement and their attitude towards physics was positive. In the same vein Oncha, (1985) reported in his findings that teachers attitude towards science is a significant predictor of pupils science achievement as well as their attitude. Igwe (1985) showed that the effect of teachers' attitudes to Mathematics was stronger on the students' mathematical achievement than on their attitudes.

Chako (1981) reported in a study of teacher and student characteristics as correlates of learning outcomes in Mathematics that teachers' attitude towards teaching significantly predict students' attitude as well as achievement in Mathematics. Teachers' attitude towards the teaching of Mathematics plays a significant role in shaping the attitude of students towards the learning of Mathematics. Bajah (1999) was of the opinion that the success of our science program me depends greatly on the classroom teacher as he is one that translates all our thoughts into action. It can be argued to some extent that the teachers' behaviors in the classrooms contribute to learning environment of their students which in turn have an effect on student outcomes. In his opinion Ofofuena (1999) said that no matter what amount of resources we might put into the nations education system, without properly prepared and motivated teachers, we can never expect from the system. Eso (1998) conceptualizes teachers' effectiveness as the managerial skills essential for enhanced classroom control and discipline. It may be true that teachers who are motivated motivate their students.

Johnson (2008) says that low levels of engagement amongst students should not be seen as "student problem" but a "teacher problem". These findings raise a question that, who is really responsible for student motivation? Educators have a greater role in motivation of students. Dozal (2009) suggests that teachers who do not motivate their students quite as well are trying to motivate their students, but may be unconsciously engaging in behaviors that undermine motivation such as neglecting to encourage co-operation, emphasizing ability rather than mastery and struggling with classroom management. However, those teachers whose students showed higher levels of motivation made attempts to scaffold, made connections across curriculum, encouraged autonomy and engaged in individual interactions with students (Doza, 2009).

Lunenburg (1990) suggest that better students- teacher relationships predict stronger academic motivation in students. Teacher reactions to students are important because students are able to read and understand the reaction of their teacher and may pick up on a teachers' perception of their success or failure. Educators should provide students with tasks that are within their "range of competence" (Linnenbrick & Pintrich, 2002) and use this as a stepping stone to helping them foster new skills, use a variety tasks and multiple forms of assessments and allow students to pick their own topics for reports and projects (Linnen brick & Pintrich, 2002). Employ the use of scaffolding,

autonomy and try to make the classroom as fun as possible while still relating material to the curriculum (Dozal, 2009) Try to be as fair and flexible in rule setting and enforcement as possible because it gives the children a feeling of latitude and elasticity in the classroom, decrease the amount of social comparison and competition but increase levels of understanding and comprehension (Linnenbrick and Pintrich, 2002). A motivated teacher may portray most of the above elements which in turn may foster more motivation and better sense of engagement in their classrooms, allowing learners achieve to their best (Linnenbrick & Pintrich, 2002).

Teachers' consistent classroom behaviors develop into the teachers teaching style. Teachers teaching style is a label associated with various acquirable and identifiable sets of consistent classroom behaviors regardless of the content that is being taught (Chacko, 1981). In other words, teaching style is the expression of the totality of one's philosophy, beliefs values and behaviors (Black, 1993). Teaching style is a very influential factor in students learning experiences and Teachers' do not all teach alike and that classroom teaching styles are not all equally effective (Baily, 1984).Teacher relationship with pupils is determined by teacher control behavior, although a successful teacher initially establishes respect by being knowledgeable and helpful. Related to respect is trust, a deeper personal relationship between student and teacher. Trust is not innate it depends on competence of the trusted (the teacher), and can neither be coerced nor commanded (William, 2006).

Un-motivated teachers cannot cope with difficult situations among pupils in the classroom, are less resourceful and feel that students cannot learn (Bandura, 1997). Such teachers create classroom atmospheres that "undermine students' sense of efficacy and cognitive development'' (Bandura, 1997). They rely on punishment, are pessimistic, rely mostly on strict classroom regulations and extrinsic rewards to get students study. They show weak commitment to teaching, spend less time on subject matters and devote less overall time to academic matters (Bandura, 1997).

2.3 GOAL OF THE STUDY

The study sought to investigate the Relationship between teachers' control behaviour and pupils' achievement in mathematics among primary school pupils in Vihiga sub county.

III. RESEARCH METHODOLOGY

3.1 RESEARCH DESIGN

This study was conducted through causal-comparative design. This design enables establishing of relationships or associations between two or more sets of data from a group of subjects (Creswell, 2014, Oso & Onen, 2005). The design was most appropriate for the study because it identifies cause effect relationships (Mugenda, 2013). Pupils' achievement in Mathematics is the effect while teacher Control behaviour characteristics are the possible causes under study.

3.2 RESEARCH PARTICIPANTS

A study population is a collective term used to describe total quantity of cases of the type subjected to the study (Creswell, 2014).

Vihiga sub-county had 31 primary schools when the study was conducted. All the schools were used to obtain the required data. All Mathematics teachers from Vihiga sub-county who taught the 2020 class 8 constituted the population.The sample consisted of 31 Mathematics teachers who taught class 8 during the 2020 academic year. All the schools were mixed sex day schools. Borg and Gall (1979) suggest that causal – comparative design require a sample size of not fewer than 15 cases. The sampling unit was teachers. Each mathematics teacher per school was sampled out for the study by purposive sampling technique. 1240 class 8 pupils who sat KCPE in the 2020 academic year were also involved in the study.

3.3 RESEARCH INSTRUMENTS

Reliable data depends on reliability of research instruments. To obtain precise results, suitable instruments with high level of accuracy for generalization were used. Research data was collected

by use of teacher questionnaire responses on control behavior. Pupils' achievement in Mathematics was assessed using KCPE exam results of the year 2020. The teachers responded to the item on achievement by providing tabulated results of their pupils and the class means scores. Validity is the degree to which an assessment measures what it is supposed to measure (Shushil & Verma, 2010). A pilot study was conducted and the instruments were pretested in three of the schools in Emuhaya Sub-county. Reliability of questionnaire was ensured by Cronbach's alpha and a coefficient of alpha>0.7 was reported. According to (Oso and Onen, 2011), a questionnaire has good internal consistency if the Cronbach alpha coefficient of a scale is above 0.7. Mohsen (2011) posits that the recommended Cronchbach alpha is 0.7-0.9 and that a high value of alpha > 0.9 suggests redundancies of the test items. The control behaviour questionnaire composed of ten items which had an internal consistency of $\propto = 0.780$ an indication that the instrument had adequate reliability for the study.

3.4 DATA COLLECTION PROCEDURES

The researcher visited and administered the questionnaire to the sampled schools in person . The researcher obtained KCPE results from each of the head teachers in the study area. The researcher introduced herself to the school head teachers before seeking further permission to meet Mathematics teachers and administer questionnaires to them. The researcher then organized , analyzed the data collected, drew valid conclusions from it and presented the findings.

To ensure confidentiality during data collection the respondents were not required to provide identifying information on the questionnaires. The exercise was also conducted in secluded rooms or in the teachers offices which enhanced engaging them in their own comfortable spaces. To ensure anonymity, the researcher used codes on the questionnaires also to ensure anonymity of the respondents.

3.5 DATA ANALYSIS

Researchers asserts that data analysis is the ordering, structuring and giving meaning to a set of collected data. (Cresswel,2014) . In this study data gathered was loaded into statistical package for social science(SSPS) Version 22 software for statistical analysis. Data file was created in SSPS to compile data from teacher questionnaire on teacher control behaviour as well as students' achievement from their respective achievement test scores. Statistical techniques such as percentages, frequencies, and chi square were used. The data collected using questionnaires was coded manually. Data collected on achievement in terms of mean score were summarized in two broad categories: Number of teachers whose pupils are above the average (mean score >3.0), average and below average (Mean score <3.0). The achievement was tabulated against teachers' control behaviour. Data collected was also summarized in a table for clarity in distribution of respondents by their control. From the Contingency tables, chi-square values were computed. Chi square statistic was used to determine any associations between teacher control behavior and pupils' achievement in Mathematics.

IV. FINDINGS

To investigate whether there was any statistical significant Relationship between teachers' control behaviour and pupils' achievement in mathematics in Vihiga sub-county, the Null hypothesis was tested . The null Hypothesis tested was: There was no statistical significant relationship between the teachers' control behavior and primary school pupils' achievement in Mathematics in Vihiga Sub-county, Kenya. To do this, data on teachers' control behavior and pupils' achievement in mathematics was was summarized in frequencies and percentages as shown in table i

Table i: Teachers scores on control behavior and their contribution to different levels of pupils' performance

Teacher scores on control behavior	Number of teachers with above average performers	Number of teachers with below average performers.	Total
<35	2(6.45%)	6(19.36%)	8(25.8%)
35-50	18(58.07%)	5(16.13%)	23(74.2%)

TOTAL	**20(64.52%)**	**11(35.49%)**	**31(100%)**

From table i, most of the teachers (64.52%) involved in the study contributed to above average performance of pupils in mathematics.

To determine whether there was any significant relationship between teachers' control behavior and pupil's achievement in mathematics, chi square was calculated.The chi square value calculated for teachers' control behavior and achievement was 7.2. The chi square critical for degree of freedom 1 at significant level 0.05, was 3.84. Critical value of chi square was less than the calculated one. This indicated that there was a statistically significant relationship between teachers' control behavior and achievement in mathematics of class 8 pupils on overall(Appendix).

This result is in agreement with other studies that found out that there was a significant relationship between teacher behavior and achievement in mathematics (Ross, 1992). Similar to the above findings is a study done by Abid, Kanwal, Nasir, Iqbal & Huda (2016) in Pakistan revealed a significant relationship between internal locus of control behaviour and achievement among students.

Although, its contrary to the study done in U.S by Karaman (2013) on relationship among control, and achievement motivation: a comparison of domestic and international students. Participants in this study were 307 international (n=66) and domestic (n=241) undergraduate students. The data were collected during the fall 2015 semester at a Hispanic Serving Institution in South Texas utilizing the Smith Achievement Motivation Scale (Smith, Balkin, Karaman, & Arora, 2016), the Internal-External Scale (Rotter, 1966), the Student-life Stress Inventory-Revised (Gadzella & Masten, 2005), and the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). Descriptive statistics and MANOVA were used to analyze the variables in this study. A hierarchical multiple regression was employed to analyze data. The findings showed control behaviour was not a significant predictor of academic achievement. Similarly, these findings disagree with Mina, Nahid, and Mohammed (2013) study at Shahid Bahonar University of Kerman who revealed that there was a significant negative relationship between Control and English achievement.

V. DISCUSSION

The study findings from descriptive statistics showed that although some teachers believed that their control behavior had a significant effect over their student's achievement in Mathematics, others felt that it played a minor role in their academics. These findings indicated that, low level of motivation of teachers who were involved in the study reflected in their level of control behavior. About 21.87% of respondents rated themselves as excellent on control behavior, 55% rated themselves as Good, 23.13% rated themselves as poor. This explains why these respondents had greater contribution mostly on below average performers 54.84% than above average performers 45.16%. Considering McClelland's (1987) theory of achievement motivation, the affiliate worker is motivated by interactions with other people. For achievement motivation, good interaction between teachers and pupils is important. Reprimanding directions diminish students' self confidence and indicate negative teacher behavior. This study results clearly show that if the control behavior was increased from good to excellent, the contribution of these teachers to above average performers would be much significant. .

Considering teacher responses on effort 18.8% strongly agreed while 62.5% strongly agreed with the statement that they would like their head teacher to recognize their effort. This indicates that most of the teachers would like to be recognized failure to which it affects their control behavior. This finding is in agreement with Hull's theory (1884-1952) which states that behaviors that reduce drive are largely learned. That the more an animal is rewarded for particular motivated behavior, the greater the drive, and the intent is to cause the behavior (action) to occur again. The same scenario is supported by Fredrick Hertzberg's (1950) two factor theory which asserts that work recognition is an important motivator because it gives positive satisfaction.

The results revealed that Mathematics teachers had different levels of control behavior ranging from 0

.63% to 55.0%; but most of the teachers involved in the study rated themselves on control behavior as "Good". The study results revealed that, there was a statistically significant relationship between teachers' control behavior and the primary school pupils' achievement in Mathematics in Vihiga sub-county.

CONCLUSION

There should be capacity building seminars for primary schools in order to sensitize and educate teachers on the need to improve their control behavior since it has a statistical significant influence on Mathematics achievement in primary schools in Kenya.

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