Relationship Among Intelligence, Achievement Motivation, Type of School, and Academic Performance of Kenyan Urban Primary School Pupils

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INTRODUCTION

In Kenya and many other countries examinations have been accepted as an important part of the education system. Examinations have also been used as basis for judging students ability and means of selection for educational advancement and employment.

Background

Every year thousands of Kenyan pupils sit for the Kenya certificate of primary education (K.C.P.E.) examinations. This is an examination done at the conclusion of eight years of learning in primary school. In spite of learners being exposed to the same environment, uniform program of classroom instruction and some may even possess similar IQ'S, discrepancies in academic performance have been observed to arise every year. Private schools albeit the high cost ones have attained high scores in Kenya certificate of primary education and contributed to nearly 80% of form- one students in national schools.

Extensive literature survey on academic performance of primary school showed that very few studies addressed the relationship between psycho-social factors and academic performance in Kenyan context. Most of the available literature reviewed comprise of studies done in western countries and small proportion from India. Studies in Kenyan setting are fewer in comparison to efforts made abroad. The present study attempted to explore the nature and degree of relationship between academic performance and selected psychosocial variables such as intelligence, type of school and achievement motivation.

Cognitive abilities are widely regarded as a key component of intelligence which is a concept that is difficult to define (Hucken burry and Hucken Burry, 1997). It has been said that there are probably as many definitions of intelligence as there are experts who study it. Simply put however intelligence is the biological substrate of mental ability, the brains neuroanatomy and physiology, the manifestation of intelligence, the level of performance on psychometric tests of cognitive ability (Gardner, 1993).

Numerous researches have been done in western countries on the relationship between intelligence and academic performance (Vygotsky, 1978; Brody 1997; Ceci & Williams 1997; Ediseth, 2002, Parker et al; 2004) and these researches seem to agree that there exists a relationship between intelligence and academic performance and that higher educational achievement is predictive of higher intellectual outcomes.

Intelligence as measured by the Raven's standard progressive matrices has been found to be the best predictor of student's grade point average

DOI: 10.4018/978-1-5225-2255-3.ch133

(GPA) in all grades (Laidra et al; 2007). Deary et al; (2007). Also found a strong and positive relationship between intelligence and academic achievement. This study examined between psychometric intelligence at age 11years and education achievement in 25 academic subjects at age 16. The trait and a latent trait of education achievement were 0.81. General intelligence contributed to success on all 25 academic subjects.

Direct relationship between intelligence and academic performance has also been reported. (Gagne & Stpere, 2002; Kossowska, 1999; Smith & Dobbs, 1999). In addition some researcher's view intelligence and academic achievement as identical constructs. Others assert that intelligence is causally related to academic achievement of success in academic work (Laidra, Pull mann & Allik, 2007).

Academic achievement motivation has been defined as learners need or drive towards the achievement of success in academic work (Amalaha, 1975). Motivation affects people's lives every day. People are motivated to engage in academic tasks if they value the task and if they expect to succeed at a task (Eccless, 1993, and Eccless & Wigfield, 1992).

It has been observed that many factors promote or hinder the success of students in educational institutions. Among them are achievement motivation and satisfaction with school experiences (Lampart, 1993). A great deal of research has also revealed that students of high academic motivation are more likely to have increased levels of academic achievement and lower school dropout rates (Blank, 1997).

Other studies have also reported positive relationship between motivation and academic performance (Johnson, 1996, Sandra, 2002; Brousard and Garrison 2004; and Skaalvik, 2004, 2006).

Literature evaluating the effects of school type on academic performance has grown rapidly over the past decade. For example the impact of Catholic schools (Private) on academic performance has received considerable attention in USA.

Good school facilities which are mostly found in private schools are observed to support educational enterprises. Research evidence abound (Cash, 1993; Earthman and Lemaster, 1996; Lemaster, 1997; Lackney, 1999; Cotton, 2001; and Schneider, 2002) that clean air, good light, small quiet comfortable and safe environment are important for good academic performance. Schools that have poor conditions because of factors such as overcrowding, differed maintenance or poor designs signal poor operating practices and hence poor academic performance. Such schools are mostly identified among public sector.

High school type appears to be strongly associated with educational outcomes (Checci et al; 1999). Boero et al; (2001) also confirms the importance of high school type for academic performance using his study sample of Italian college graduates that showed that the final graduation mark dropped significantly when one compared general (public) and private schools graduates. Private schools seemed to do better.

Evans and Schwab (1995) report a study on the effects of Catholic schools on high school completion and college enrolment probability. They also highlighted the endogeneity issues that can arise from self selection of students into Catholic schools and used instrumental variables to identify the effects of Catholic schools attendance on measures of academic success. They concluded that catholic schools raise subsequent educational outcomes. The Catholic schools in this case represented private schools.

Although many studies are in favour of private schools doing better in academic performance as compared to public schools, other studies also seem to differ with the idea. For example, Bertola & Cheddi (2002), Studied a sample of University students from the University of Millan. Their study revealed that those coming from general (public) schools scored better than otherwise comparable students on a range of performance indicators. They also considered the differences in academic performance between public and private schools students, finding that public schools were associ-