

The Relationship among School Adjustment, Gender and Academic Achievement amongst Secondary School Students in Kisumu District Kenya

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Poor school adjustment leads to low academic achievement, behavioural problems, discordant educational aspirations and even school dropout. The current study investigated the levels of school adjustment and its relationship with academic achievement. Gender differences in school adjustment were also examined. The theory used in the current study is the stage-environment fit theory propounded by Eccles and Midgley. A cross sectional research design was employed. The target population was 4500 students. The sample consisted of 450 secondary school students with mean age 18.38, SD 1.078. The form four classes in the selected schools were used. Questionnaires as well as official KCSE examination results were used to collect data in the study. Cronbachs' alpha as well as a pilot study was used to depict the reliability of the instrument. Face validity was also ascertained by three experts from the department. Data was analyzed using descriptive statistics like the mean, frequency counts and percentages. The inferential statistics that were used in the study were t-tests. The results showed that there were no significant differences between girls and boys in school adjustment, there were significant differences between high achievers and low achievers in dedication, absorption, engagement and school adjustment. The study recommends that the study environment of the low achievers be further scrutinized

Keywords: school adjustment, academic achievement, gender, secondary school students, form four examinations

INTRODUCTION

Secondary school students' adjustment is a phenomenon that is of great concern to educationists as well as health practitioners. Educationists need to know what they can do to help their students adjust and benefit from school (Mizelle, 1999). Health practitioners on the other hand are concerned about the well-being of students (Knyazev, et al. 2002). School adjustment is a broad construct which consists of many different aspects such as academic achievement, school satisfaction, school engagement and pro social behavior. Well-adjusted students usually value what they are learning, are positively involved in classroom activities and receive high grades. Kiuru, et al. 2009). Poor school adjustment leads to low academic achievement, behavioral problems, discordant educational aspirations and even school dropout. (Vasalampi et al. 2009; Raju & Rahamtula 2007)

Arkoff (1968) quoted in Abdullah et al. (2009) defines school adjustment as a person's interaction with his or her environment and covers academic achievement, personal growth and accomplishments outside the classroom such as in art, music, creativity and leadership. According to him an adjusted student is one who obtains adequate grades, passes his or her courses and eventually graduates. Different researchers have defined school adjustment in several ways. (Wang, et al. 2008) in their study, uncertainty

orientation in Chinese children: Relations with school and psychological adjustment defined school adjustment as scores on academic achievement, distinguished studentship and self-perceptions and teacher rated learning problems. Wei & Williams (2004) in their study of the relationship between peer victimization and school adjustment in sixth-grade students: investigating mediation effects, conceptualized school adjustment as school attachment, attentive behavior and academic achievement. School adjustment has also been envisaged as social- emotional development touching on attention, activity level, anxiety, conduct problems and learning (McGhee and Mangrum, 2007). They designed the McGhee and Mangrum inventory which measures attention and academic problems, hyperactivity and impulsivity, anxiety and oppositional behavior. From the studies mentioned above it is clear that school adjustment incorporates aspects of well-being as well as academic achievement. For this reason the current study operationalized school adjustment as engagement, satisfaction with school and academic achievement.

Studies looking at level of college adjustment are few (Belvedere, 2000). Abdulla et al. 2009 in their study adjustment amongst first year students in a Malaysian university investigated the level of adjustment of 250 students from six faculties. They gave the students questionnaires that measured academic adjustment,

social adjustment, personal emotional adjustment and institutional attachment. They found that 70 % of the respondents overall adjustment were at the moderate level while only 4 % obtained a high level of overall adjustment. 26% were found to be in the low category for overall adjustment. Majority of respondents were in the moderate category. However 42.8% of the respondents were found to be at the low level for the personal emotional scale which indicated that many subjects in this study were exposed to psychological and somatic problems in adjusting themselves to campus life. Students adjustment of the four subscales were as follows:- Respondents achieved the highest level of adjustment in institutional attachment $M=6.4$ $SP=0.88$ followed by social adjustment $M=6.10$ $SP=0.92$ academic adjustment $M=5.68$ $SP=0.94$ and personal emotional adjustment $M=4.97$ $SP=1.34$. Gan et al in their study the two factor structure of future- oriented coping and its mediating role in student engagement gave 171 college students questionnaires with future oriented coping inventory and Utrecht work engagement scale- student version (UWES-S) and the stress perception indicator. The UWES-S had 16 items representing vigor, dedication and absorption and represents the expanded version of the engagement scale used in the current study. They found the following:- for vigor the $M=17.08$ and $SD=4.82$, for dedication the $M=18.03$ and $SD=4.52$, while for absorption the $M=14.23$ and $SD=3.65$. Another study by Vasalampi et al (2009) looking at adolescents' self- concordance, school engagement, and burnout and how they predict their educational trajectories used the same instrument as the current study for school engagement. They used 614 secondary school students whom they surveyed thrice. Their mean for school engagement was 2.99 while the SD was 1.66.

Research on gender differences in school adjustment has portrayed that girls are better adjusted as compared to boys. This has been evident in studies from the east and west. One such study was by Wang et al. (2008) who used a sample of 390 students in their study. They looked at uncertainty orientation in Chinese children: Relations with school and psychological adjustment and found that girls had higher scores on academic achievement, distinguished studentship and self-perceptions and lower scores on teacher rated learning problems than boys. Uncertainty orientation was significantly and positively associated with academic achievement, teacher-rated school competence and self-perceptions of competence. It was also significantly and negatively associated with teacher rated learning problems and loneliness. Another study in which girls performed better than boys was by Prakash and Coplan (2007) who used a sample of 929 children out of which 62.4% were males while 37.65 were females. They studied the socio emotional characteristics and school adjustment of socially

withdrawn children in India. They found that boys were rated with lower academic scores than girls. $F(1, 545) = 13.75$, $p < .05$. ($M = 3.23$, $SD = .94$ compared with ($M = 3.60$, $SD = .88$). Another study by Kiuru et al. (2009) looked at 1494 adolescents from Finland. They used questionnaires concerning peer relations and adjustment and maladjustment. 360 peer groups were identified and only peer group members were analyzed. Results showed that members of adolescents peer groups resembled each other in terms of school adjustment and maladjustment. Members of girls' cliques resembled each other more in satisfaction with their educational choice and school engagement when compared with boys. This shows that there are gender differences in school adjustment. The gap that the current study seeks to address concerning gender differences is based on the academic achievement of the gender. Whereas the studies by Wang et al (2008), Prakash and Coplan (2007) and Kiuru et al (2009) are based on student populations where girls achieve better academically, the current study seeks to find out the scenario in a situation where boys achieve better academically.

Research on academic achievement and school adjustment is not conclusive. Niebrzydowski and Porcy (1991) looked at school adjustment of high ability students at the end of an eight year period. The students started school one year earlier because they had demonstrated outstanding abilities while in nursery school. Majority of the students tested displayed high or very high achievement and appropriate interpersonal relations with peers. However one quarter displayed low achievement and low social acceptance, although they were of high ability. Another study by Maatta et al (2007) looked at achievement orientations, school adjustment and well-being among 734 Swedish adolescents. They identified five achievement orientation groups: optimism, defensive pessimism, self-handicapping, learned helplessness and a group showing average levels of criteria variables. A decrease in depressive symptoms and an increase in engagement with school predicted a move to the use of optimistic and defensive – pessimistic groups whereas a reverse pattern predicted a move to the helplessness and self-handicapping groups. The optimistic and defensive-pessimistic achievement orientations at time 1 predicted an increase in engagement with school and a decrease in depressive symptoms later on whereas self-handicapping and learned helplessness predicted a decrease in engagement with school and increases in depressive symptoms and norm breaking behavior. Salmela-Aro, Kiuru and Nurmi (2008) in their study, the role of educational track in school burnout hypothesized that students taking the academic track which constitutes the high achievers would experience more burnout whilst students taking the vocational track who were low achievers would

experience less burnout. In essence their study was comparing school adjustment between the high achievers and the low achievers pursuing different curricula. The Finnish education system is such that at the age of 7, children move to comprehensive schools where they remain for 9 years. Thereafter, 55% of the adolescents enter senior high schools, 37% vocational schools, 2% attend voluntary 10th grade and 6% exit formal education. Hence taking the 55% entering senior high schools as high achievers, the results at the mean level showed that adolescents on an academic track experienced more overall exhaustion than their counterparts on a vocational track. For cynicism the results at the mean level showed that adolescents on a vocational track experienced a higher initial level than those on an academic track. For those on an academic track the level of cynicism increased across time. The results at the mean level showed that adolescents on a vocational track experienced higher initial levels of inadequacy than adolescents on an academic track. However with time the level of inadequacy increased for those on the academic track and decreased for those on the vocational track.

The current study seeks to extend our knowledge on the school adjustment of high achievers and low achievers who are learning using the same curriculum up to form four. The focus of this paper therefore was to find out the levels of school adjustment amongst secondary school students; to find out whether there were significant differences between male and female students in school adjustment and to find out whether there were significant differences between high achievers and low achievers doing the same curriculum in school adjustment. The theory used in the current study is the stage-environment fit theory. The theory was propounded by Eccles and Midgley in 1989. The theory states that the development of any given behavior or attribute depends on the degree of match between a child's existing abilities, characteristics and interests and the opportunities afforded to him/her in the immediate social environment. Fit is optimal when the environmental features experienced are structured according to the child's current needs and developmental level. A mismatch in needs reflects asynchrony between the type or amount of stimulation in the environment and the child's existing abilities or motivations. According to this theory students will experience declines in motivation and performance if their educational environment does not support their current developmental stage and promote continued cognitive and emotional developmental growth. It is the fit then between the developmental trajectory and the environmental change trajectory that determines the motivational consequences. Thus in the current study, school adjustment levels will be used to determine the environmental fit.

METHODS

Research Design

The cross sectional research design was used for this study. Cross sectional research in education involves making careful descriptions of educational phenomena. The advantage is that it is done at one point in time and hence it saves time (Gall, Borg, & Gall, 1997).

Population

The study population was made up of 4500 students. A total of 52 schools made up the target population. Only one third of the schools were to be used giving a total of 17.

Sample and Sampling Technique

A sample constituting 10 % of 4500 students was used, giving a total of 450. A total of 12 schools were used in the study. Stratified sampling technique as well as cluster sampling technique was used. Stratification was done by gender and by type of school after taking into account a representative spectrum of mean scores and geographical spread. It was followed by cluster sampling technique which involved the study of a number of intact classes.

Data Collection Procedure

Data was collected in two waves. The first wave of data was collected in the months of September and October 2009. The students filled in the questionnaires in approximately 40 minutes. Official records of the Kenya Certificate of Primary Education Examinations (KCPE) results were collected from the schools where these were available. The second wave of data collection was carried out in March 2010 as soon as Kenya Certificate of Secondary Education Examinations (KCSE) results were out. It involved collecting the KCSE mark lists from schools which participated in the study.

School Adjustment was measured by combining scores from school engagement, school satisfaction and academic achievement.

The School Engagement Subscale was derived from the Utrecht Work engagement scale which was originally developed by Schaufeli and Bakker (2003). The current study used the abbreviated student version developed by Salmela Aro (2004). It is further divided into three subscales which are:-

Vigor (eg when I study I feel that I am bursting with energy)

Dedication (eg I am enthusiastic about my studies)

Absorption (eg Time flies when I am studying)

Satisfaction with School Subscale consists of four uni dimensional statements two of which are concerned with schooling and two with subject choices. It was locally developed with the Kenyan educational system in mind. eg (To what extent are you satisfied with your choice of subjects?)

(To what extent are you interested in the subjects you are taking?)

Demographics and Data Analysis

Data was analysed using SPSS version 12. Boys were coded as 1 and girls were coded as 2. The mean scores for the KCPE results for this sample which was 311 was used to separate the high achievers who were coded as 1 from the low achievers who were coded as 2. For this sample the provincial mean scores of 247 in 2005 and 247 in 2008 were very low and could not be used to differentiate high achievers from low achievers (Nyanza Province Education Brief 2010). Form fours were coded as 4. The mean for adjustment was 15.4 and this was used to separate students whose school adjustment was high from those whose were low. The data was made up of 390 students in form 4. Their mean age was 18.38 years with a standard deviation of 1.078. The number of boys was 230 whereas girls were 160. The students were both from boarding and day schools. For this sample, 10 % of the mothers and 20% of the fathers were dead. The unemployed constituted 18.5% of the mothers and 10.3% of the fathers. Businessmen constituted 17.7% whereas businesswomen were 39.5%. Only 32.3% of the fathers and 17.2% of the mothers were employed, whilst 15.9 % of the fathers and 12.1% of the mothers were farmers. These findings corroborated well with the high poverty index for the district (Republic of Kenya 2006).

Table I : School adjustment levels

	Vigor	Dedication	Absorption	Engagement	Adjustment
Mean	3.90	5.32	5.09	4.77	15.43
S.D	1.47	1.20	1.18	1.00	2.69

The first objective of this study was to find out the levels of school adjustment. Table i shows that students have high dedication levels, followed by absorption and finally vigor. This result is different from Gan et al (2007) who also found dedication as the highest and this was followed by vigor and a much lower mean of absorption. Vasalampi et al who used the same instrument got a mean of 2.99 whereas the current study had a mean of 4.77. This high amount of dedication is expected from students in school, what with high levels of poverty. Students believe that school is their only savior, since education is emphasized as the only way out in Kenya.

Table II : Gender and School Adjustment

	F	M	SD	sig.	Scale range	
Vigor	Boys	0.036	3.89	1.47	0.729	0 - 6
	Girls		3.94	1.48	0.729	0 - 6
Dedication	Boys	3.574	5.37	1.11	0.327	0 - 6
	Girls		5.25	1.31	0.342	0 - 6
Absorption	Boys	0.188	5.09	1.22	0.943	0 - 6
	Girls		5.1	1.12	0.942	0 - 6
Engagement	Boys	0.299	4.78	0.99	0.887	0 - 6
	Girls		4.77	1.02	0.887	0 - 6
Adjustment	Boys	0.489	15.63	2.61	0.083	2 - 20
	Girls		15.15	2.78	0.087	

The second objective of this study was to find out whether there were gender differences in school adjustment. Table ii shows that there were no significant differences between boys and girls in school adjustment. Overall the boys have higher school adjustment when compared to the girls although the results are not significant. This result is different from the studies in which girls perform better in school as compared to boys. Given that this population was a mixture of boarders and day scholars, by the time the students reach form four only the serious girls who are up to the task are left. This is because girls perform very poorly and also have a high drop- out rate in Nyanza. Whereas the national dropout rate for girls is 6.2, Nyanza has a dropout rate of 10.3 (Muganda-Onyando and Omondi 2008)

Table III: Level of Academic Achievement and School Adjustment

	F	M	SD	sig.	Scale range	
Vigor	High	0.870	3.90	1.49	0.778	0 - 6
	Low		3.94	1.39	0.775	0 - 6
Dedication	High	15.03	5.49	1.03	0.001**	0 - 6
	Low		5.09	1.35	0.002**	0 - 6
Absorption	High	0.309	5.23	1.07	0.006**	0 - 6
	Low		4.89	1.31	0.008**	0 - 6
Engagement	High	10.87	4.87	.94	0.025**	0 - 6
	Low		4.64	1.05	0.028**	0 - 6
Adjustment	High	3.873	16.64	2.32	0.000**	2 - 20
	Low		13.66		0.000**	

The third objective of the study was to find out whether there would be significant differences in the school adjustment of high achievers and low achievers. Table iii shows that there was a significant difference in dedication, absorption, engagement and adjustment. This result concurs with Salmela Aro et al 2009 who found that the lower the academic achievement, the lower the school engagement and hence adjustment. Indeed another study by Robles-Pina (2011) also noted that one of the predictors of retention were parents who had a low sense of responsibility for their children’s adjustment to school.

RECOMMENDATIONS

The current study recommends that the educational environment for the low achievers be reconsidered especially to suit their school adjustment.

CONCLUSION

The study concluded that for this population despite the fact that girls performance is usually poorer than boys there were no differences in school adjustment. Differences in school adjustment were manifest between the high achievers and low achievers. Hence it is very important to look at level of achievement when considering school adjustment.

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