Education

Influence of external factors of adolescents' popularity on academic performance of students in secondary schools in Baringo North Sub-County, Kenya

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Abstract

Adolescence is a stage during which individuals tend to be highly concerned with their social status in groups. Adolescents may desire to be popular among their peers but at the same time concentrate on their academic performance. This study sought to determine the influence of external factors of adolescents' popularity on academic performance among students in secondary schools in Baringo North Sub-county. Ex-post facto design was applied in the study. Purposive, proportionate and simple random techniques were used to obtain the sample for the study. The target population was 8694 secondary school students. Out of this, 383 students were sampled. Data was generated by using students' questionnaires. The study employed both descriptive and inferential statistics. Pearson correlation coefficient and simple and multiple linear regression analysis was conducted at significant level of $\alpha = 0.05$. Data analysis was done with the aid of Statistical Package for Social Sciences version 26. The study established that external factors of adolescents' popularity had a positive significant influence on academic performance of students in secondary schools in Baringo North Sub-county with correlation coefficients of ($r = 0.760$, $p < 0.05$). The findings can be considered significant to school administrations and teachers as they may utilize external factors of adolescents' popularity to improve academic performance of students in school since they positively affect students' academic performance.

Keywords: academic, achievement, external, student, baringo

1. Introduction

Conducted a study among Indian adolescents and reveled a greater prevalence of the use of electronic media and telecommunication gadgets, reflecting a larger engagement in sedentary activities than in cultural, community, and physically demanding leisure activities. Furthermore, the study notes that the students from metro and urban areas reported greater involvement in multiple sedentary activities, while rural adolescents reported greater engagement with watching television, listening to fast music and religious leisure [31].

Examined adolescent's daily activities and found that they spend more time talking to their friends than engaging in any other activity. In a typical week, high school students will spend twice as much time with their peers as with adults. This gradual withdrawal from adults begins in early adolescence. In sixth grade, adults (excluding parents) account for only 25 percent of adolescent social networks [23]. Noted that adolescents want to show their independence and maturity so they prefer spending time without adult supervision, [19].

Study used a person-centered approach to identify adolescents' peer status profiles and examined how these profiles differed regarding the development of school engagement and loneliness. Results of the study indicated that the popular-liked class had the lowest levels of behavioral engagement and loneliness; the unpopular-disliked class had higher levels of behavioral engagement, less steep increases in behavioral disaffection, and showed more loneliness and the normative class revealed moderate trajectories of engagement and loneliness. Moreover, boys and girls differed in their academic and psychosocial development [5].

According to a study done by [16], higher popularity status is associated with shorter sleep duration and greater sleep insufficiency. Stratifying by gender, popular girls report shorter sleep duration and greater sleep insufficiency compared to less popular girls. Girls who are friends experience more sleep insufficiency compared to group member girls. In contrast, isolated boys reported more sleeplessness symptoms compared to group members.

In their study investigated whether early adolescents' disruptive classroom behavior is predicted by descriptive classroom norms for such behavior for example mean level of classmates' disruptive behaviors. They further examined whether classmates' influence on a student's disruptive behavior varies based on teacher's instructional practice. Participants were 701 adolescents ($M = 13.12$ years; 48.8% girls) who were followed across six measurement points from Grades 7 through 9. Results of the study showed that subsequent individual disruptive behavior was predicted by earlier levels of disruptive behavior in the classroom. Further the study showed that peer influence on disruptive behavior was lower when students perceived that their teacher's instruction was more supportive and interesting [22].

Says that teachers and peers play an important role in shaping students' engagement. In their study they found out that positive teacher–student relationships were associated with more behavioral engagement over time, whereas negative

teacher–student relationships, higher likeability and higher popularity were related to less behavioral engagement over time. From the mentioned study above, it can be concluded that teachers and peers constitute different sources of influence, and play independent roles in adolescents' behavioral engagement [6].

According to study done by [34] on the social economics of adolescent behavior and measuring the behavioral culture of schools in China where their study established that School academic performance, which is based on standardized test results, is strongly correlated with social culture regarding popular behaviors.

In their study, argued out that the moral climate in the sports context is considered to be of substantial influence on moral outcomes in young athletes [8]. Argued that adolescent's popularity is associated with good looks, intelligence, the ability to tell good stories and jokes, some evidence of good social-economic background and some ability at games, sports and athletics. They continued to say that popular children of different age-groups possess different characteristics admired by their age mates [17].

According to [4] Participation in school physical education rises during early adolescence before decreasing significantly, and participation in competitive sport and club sport significantly decreased over time. This study dealt with female adolescents but the current study dealt with female and male adolescents.

Conducted a study and found a negative correlation between adolescents' attitudes towards sports and loneliness. The relationship between loneliness and happiness was also observed to be negative. In addition, it was observed that adolescents' attitudes towards sports and loneliness were negatively related. This study dealt with adolescents' attitude towards sports and loneliness but the current study dealt with sports and adolescents popularity [17].

Remarked that adolescents may feel increased pressures to be active in sports in small schools because fewer students are available to participate. Conversely larger schools may actually have fewer opportunities and more uninvolved students [1].

In their research on school bonding among African American adolescents in low-income communities found out that positive school bonding is a significant precursor to students' school success [33]. Also found out that negative peer norms, exposure to community violence, and poor mental health were negatively correlated with school bonding, while parental monitoring, positive self-regard, and future orientation were correlated with higher school motivation [33]. The results further indicate that students who were classified as having high or moderate school bonding were more likely to live with both parents, experience higher levels of parental monitoring, and exhibit positive self-regard.

In a study on the secrets of Chinese students' academic success: academic resilience among students from highly competitive academic environments found out that Chinese parents' supervision and school involvement and recognition are significantly and negatively associated with low school commitment and individual conflict attitude, which are important protective factors in reducing adolescents' risk of problem behaviors and promoting academic resilience. This study dealt with Chinese students but the current study dealt with Kenyan students in secondary schools [16].

According to [28] Parenting is a dynamic process, influenced by socio-cultural factors. It is an important contributing factor to child development and childhood psychopathology. Found out that despite hypothesized cultural differences between the West and India, the effect of parenting styles on children appears to be similar across culture and culture did not serve as a moderator for parenting style and child outcome [28].

A study by [7] revealed that the effect of popularity depends on parental monitoring, such that the relationship between popularity and delinquency is positive when parental monitoring is low, but there is no relationship when parental monitoring is high. Furthermore, the study indicates that parental monitoring contributes to the relationship between peer violence and delinquency such that there is a stronger relationship when parental monitoring is low.

2. Materials and Methods

2.1 Location of the study area

This study was carried out in Baringo North Sub-county, which is one of the sub-counties in Baringo county Kenya. Administratively, the sub-county is sub-divided into four divisions and further eleven locations and numerous villages scattered across its length and Breath. It lies at an average altitude that range between 1000 and 2200m above the sea level. The Sub-county covers an area of 142.3 square kilometers. The sub-county has a population of 73,177 persons, population density of 53 persons and 9,160 households [9]. The sub-county has thirty registered public secondary schools. Some of the schools are co-educational (mixed). The sub-county has a student population of 8694. There exist four tertiary institutions in the sub-county namely, Bartek Institute and Nehema Institute of Science and Technology. There are vocational training institutions in the sub-county. The sub-county was chosen because of evidence of a continuous trend of poor performance over the years. In addition, the site was also chosen because no research of this nature has been conducted within the sub-county.

2.2 Population of the study

Target population is the specific population about which information is desired. Explains that the target population should have some observable characteristics to which the researcher intends to generalize the results of the study. The sub-county has 30 registered secondary schools. Among these schools, four are Extra County; nine are county while the rest are Sub County. The sub-county has a student population of 8694. For this study, the target population comprised all the students in the secondary schools from form one to form four in Baringo North sub county, Baringo county [21].

2.3 Sample size and sampling procedures

According to [30] the formula n= N/ 1+N (e^2), where n is the sample size, N is the population size (8694), e is the level of precision 0.05 is used to determine the sample size. This gave

a sample size of 383. The following formula was adopted for calculation of sample size.

$$n = \frac{N}{1 + N(e^2)}$$

Noted that the sampling frame for any probability sample is a complete list of all the cases in the population from which a sample is drawn. A sample is a smaller and more accessible sub set of the population that adequately represents the overall group, thus enabling one to give an accurate that is within acceptable limits, picture of the population as a whole, with respect to the particular aspects of interests of the study [29].

2.4 Research instrument

The researcher used students' questionnaire which had basic instructions. The questionnaire sought demographic information including information on adolescents' popularity towards academic performance. Questionnaire was selected because it provides a high degree of data standardization and adoption of generalized information amongst any sampled population [13].

2.5 Data collection

The researcher obtained permission to conduct the study from National Commission for Science, Technology and Innovation (NACOSTI) through the Dean of students' office, Moi University. Once the research permit was obtained, the researcher sought permission from the County Director of Education, Baringo county and Sub-County Director of Education, Baringo North to carry the research in the selected schools. Then, the school administrators from the selected schools were requested to allow their students to participate in the study. Informed consent through an introductory letter was obtained from the students to be sampled before administration of the questionnaires. The students were assured of confidentiality. Participants in the study were asked to fill the questionnaires. The completed research instruments were collected and used in analysis.

2.6 Data analysis

The completed questionnaires were coded and the participants' responses were scored and keyed into a computer data file. Statistical analysis was done using the Statistical Package for Social Sciences computer programme. Both descriptive and inferential statistics was used to analyze the data. In addition, the researcher autocorrelation and multi-collinearity tests on external factors of adolescents' popularity. The descriptive statistics that were used include percentages, frequencies, mean and standard deviation. Inferential statistics included; Pearson correlation coefficient, simple and multiple linear regression analysis were also employed. Analysis of variance (ANOVA) was used to test the research hypothesis at a significant level of 0.05. The following multiple linear regression models used for this study was as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where Y = Academic performance
α is a constant, intercept of the equation.
β_1 -β_4 is the regression coefficient of the independent variables
X_1= Time management
X_2= Teachers influence
X_3= Participation in sports
X_4= Parental influence
ε = error term

3. Results

3.1 Descriptive statistics of external factors of adolescents' popularity

Descriptive statistical analysis was used to analyze elements of external factors of adolescents' popularity (parental influence, time management, participation in sports, teachers influence). The mean was analyzed based on the respondent's choices scaled between strongly agree and strongly disagree as indicated in table 3.1.

Table 3.1: Elements of time management

Elements of Time Management	N	Min	Max	Mean	Std. Dev.
Popular student usually turns up early for prep	383	1	5	4.27	1.140
Popular student usually follows personal study timetable	383	1	5	4.12	1.141
Popular student usually values class work than free time	383	1	5	4.07	1.244
Popular student usually seek help from teachers and students	383	1	5	4.04	1.197
Popular student most times has a personal watch	383	1	5	3.97	1.240
Popular student usually spends most time with fellow students	383	1	5	3.11	1.355
Popular student hardly uses a watch when studying	383	1	5	2.59	1.413
Popular student often values free time	383	1	5	2.08	1.328
Popular student usually studies without personal study timetable	383	1	5	1.99	1.251
popular student usually does not complete assignment on time	383	1	5	1.98	1.272

Based on the findings of the study in table 3.1, the respondents agreed (Mean of approximately 4) that popular student usually turns up early for prep, usually follows personal study timetable, usually values class work than free time, most of the time has a personal watch, usually seek help from teachers and students. The respondents were undecided (Mean of approximately 3) whether popular student usually spends most time with fellow students and hardly uses a watch when studying. Additionally, the respondents disagreed (Mean of approximately 2) on the following aspects of time management.

Table 3.2: Elements of teachers influence

Elements of Teachers Influence	N	Min	Max	Mean	Std. Dev.
Popular student has teachers believing in them	383	1	5	4.05	1.026
Popular student is mostly referred as role model by teachers	383	1	5	3.82	1.288
Popular student is usually appointed to leadership responsibilities	383	1	5	3.53	1.391
Popular student has questions always directed to him/her by teacher	383	1	5	3.39	1.239
Popular student is given extra assignment by teachers	383	1	5	3.29	1.387
Popular student has teachers always pointing good things in him/her	383	1	5	3.25	1.354
Popular student has hardly any questions directed to him/her by teachers	383	1	5	2.47	1.320
Popular student is rarely referred to as role model by teachers	383	1	5	2.34	1.354
Teachers are rarely friendly to the popular student	383	1	5	2.27	1.339
Popular student has teachers pushing them to face hard issues/situations	383	1	5	2.24	1.279

Based on the findings of the study in table 3.2, the respondents agreed (Mean approximately 4) that popular student has teachers believing in them, is mostly referred as role model by teachers and usually appointed to leadership responsibilities. The respondents were undecided (Mean of approximately 3) whether popular student has questions always directed to him/her by teacher, given extra assignment by teachers and has teachers always pointing good things in him/her. Furthermore, the respondents disagreed (Mean of approximately 2) that popular student has hardly any questions directed to him/her by teachers, rarely referred to as role models by teachers, teachers are rarely friendly to the popular student and has teachers pushing them to face hard issues/situations.

Table 3.3: Elements of participation in sports

Elements of Participation in sports	N	Min	Max	Mean	Std. Dev.
Popular student always enjoys sport activities	383	1	5	3.95	1.200
Popular student has appropriate sports attire	383	1	5	3.88	1.143
Popular student encourages others to join sports	383	1	5	3.67	1.210
Popular student is rarely found in mistakes in school	383	1	5	3.62	1.476
Popular student is mostly active in sports	383	1	5	3.58	1.443
Popular student usually represents school in competitions	383	1	5	3.50	1.451
Popular student is usually selected to leadership positions	383	1	5	3.00	1.423
Popular student is inactive in sports	383	1	5	2.33	1.417
Popular student values sports than class work	383	1	5	2.12	1.176
Popular student is usually forced to put on appropriate sport attire	383	1	5	1.79	1.083

Based on the findings of the study in table 3.3, the respondents agreed (Mean of approximately 4) that popular student always enjoys sport activities, has appropriate sports attire, encourages others to join sports, rarely found in mistakes in school, is mostly active in sports and usually represents school in competitions. The respondents were undecided (Mean of approximately 3) whether popular student is usually selected to leadership positions. In addition, the respondents disagreed (Mean of approximately 2) on the following aspects of participation in sports: Popular student is inactive in sports, values sports than class work and is usually forced to put on appropriate sport attire.

Table 3.4: Elements of Parental Influence

Elements of Parental Influence	N	Min	Max	Mean	Std. Dev.
Popular student parents encourage good discipline	382	1	5	4.39	.874
Popular student parents are punctual in attending school academic activities	383	1	5	4.28	1.007
Popular student parents usually follow up his/ her discipline in school	383	1	5	3.99	1.130
Popular student is always punctual in attending religious activities	383	1	5	3.96	1.297
Popular student parents pay fee per term or year	383	1	5	3.80	1.167
Popular student has well educated parents	383	1	5	3.36	1.157
Popular student usually gets pressure to perform from parents	383	1	5	3.29	1.413
Popular student has wealthy parents	383	1	5	3.06	1.138
Popular student is usually given a lot of money by parents	383	1	5	2.53	1.184
Popular student claims parents have no stable income	383	1	5	2.24	1.172

Based on the findings of the study in table 3.4, the respondents agreed (Mean of approximately 4) that popular student parents encourage good discipline, popular student parents are punctual in attending school academic activities, popular student parents usually follow up his/ her discipline in school, popular student is always punctual in attending religious activities and popular student parents pay fee per term or year. The respondents were undecided (Mean of approximately 3)

whether popular student has well educated parents, usually gets pressure to perform from parents, has wealthy parents and is usually given a lot of money by parents. Additionally, the respondents disagreed (Mean of approximately 2) that popular student claims parents have no stable income.

3.2 Descriptive statistics of academic performance of popular students

The study used popular student average marks to measure the academic performance of popular students. Table 3.5 shows the descriptive statistics of popular student average marks per gender.

Table 3.5: Popular student average marks

		Popular Student Average Marks				
		Mean	**Row N %**	**Standard Dev.**	**Maximum**	**Minimum**
Gender of respondent	Male	44.214	100.0%	11.598	72.500	6.200
	Female	47.883	100.0%	11.917	78.000	3.000

The descriptive results on table 3.5 indicate that popular male student mean is 44.214 with minimum and maximum marks of 72.50 and 6.20 respectively. Comparatively female popular student mean is 47.883 with minimum and maximum marks of 78.00 and 3.00 respectively. This suggest that female popular students perform well compared to popular male student in public secondary schools in Baringo North Sub-county.

3.5 Inferential statistics

The study used inferential statistics (Pearson correlation, simple and multiple linear regressions) to analyze the research objectives. Additionally, the researcher conducted autocorrelation tests and autocorrelation test for external factors.

3.2.1 Autocorrelation tests for external factors

The test for autocorrelation were conducted using the Durbin Watson tests.

Table 3.6: Autocorrelation Test

Independent Variables	**Dependent Variable**	**Durbin-Watson**
External factors of adolescents' popularity (Parental influence, Time management, Participation in sports, Teachers influence)	Academic performance	1.533

Based on the results of the study in table 3.6, the Durbin-Watson statistic was 1.533 which is between 1.5 and 2.5 and therefore the data used in the study was auto correlated.

3.2.2 Multi-collinearity test for external factors

The researcher used tolerance (T>0.2) and Variance Inflation Factor to test for multi-collinearity.

Table 3.7: Multi-collinearity test

Variables		**Collinearity Statistics**	
		Tolerance	**VIF**
External factors of adolescents' popularity	Time management	0.822	1.217
	Teachers influence	0.204	4.898
	Participation in sports	0.563	1.775
	Parental influence	0.210	6.647

Dependent Variable: Academic performance of students in public secondary schools in Baringo North Sub-county. The results of the study in table 3.7 indicates that there was no multi-collinearity as shown by tolerance (T>0.2) and Variance Inflation Factor (VIF<10).

3.2.3 Correlation matrix

The study used Pearson Correlation analysis to establish the kind of relationship that exists between the variables (external factors of adolescents' popularity and academic performance).

Table 3.8: Pearson correlation analysis of the relationship between external factors of adolescents' popularity and academic performance

		Academic performance	**External factors of adolescents' popularity**
Academic performance	Pearson Correlation	1	
	Sig. (2-tailed)	0	
	N	383	
External factors of adolescents' popularity	Pearson Correlation	.760**	1
	Sig. (2-tailed)	.000	
	N	383	383

**. Correlation is significant at the 0.05 level (2-tailed).

Based on the results in table 3.8, the study revealed the existence of a statistically significant relationship of (r = 0.760, p < 0.05) between external factors of adolescents' popularity and academic performance of students in public secondary schools in Baringo North Sub-county.

3.3 Multiple regression analysis

The study used multiple linear regression analysis to determine the influence of external factors of adolescents' popularity on academic performance of students' in secondary schools in Baringo North Sub-county.

3.3.1 Influence of external factors of adolescents' popularity on academic performance of students in public secondary schools

The external factors of adolescents' popularity used in the study include: Parental influence, time management, participation in sports and teachers influence. The study used multiple linear regression to determine the influence of external factors of adolescents' popularity on academic performance of students' in secondary schools.

Table 3.9: Multiple regression results of influence of external factors of adolescents' popularity on academic performance of students' in secondary schools

Model Summary									
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Change Statistics**				
					R Square Change	**F Change**	**df1**	**df2**	**Sig. F Change**
1	.635a	.402	.394	.522791	.402	63.098	4	378	.000
a. Predictors: (Constant), Parental influence, Time management, Participation in sports, Teachers influence									
b. Dependent Variable: Academic performance									

Anova						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	68.982	4	17.245	63.098	.000b
	Residual	103.311	378	.273		
	Total	172.293	382			
a. Dependent Variable: Academic performance						
b. Predictors: (Constant), Parental influence, Time management, Participation in sports, Teachers influence						

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.070	.313	0	-.224	.823	-.686	.545
	Time management	.439	.048	.401	9.115	.000	.344	.534
	Teachers influence	-.269	.105	-.225	-2.549	.011	-.476	-.062
	Participation in sports	-.166	.076	-.116	-2.189	.029	-.314	-.017
	Parental influence	.976	.166	.605	5.887	.000	.650	1.302
a. Dependent Variable: Academic performance								

Based on the results of the study in table 3.9, parental influence, time management, participation in sports and teachers influence for 40.2% of academic performance in secondary schools in Baringo North Sub-county (R^2 = 0.402). The level of significance was 0.000 with an F value of 63.098 which indicates a statistical significant relationship between external factors of adolescents' popularity and academic performance in secondary schools in Baringo North Sub-county because the P value which is 0.000 is less than 0.05 (P<0.05). Hence, the null hypothesis; ''external factors of adolescents' popularity does not have significant influence on academic performance of students' in secondary schools in Baringo North Sub-county'' was rejected and alternative hypothesis which states that external factors of adolescents' popularity have significant influence on academic performance of students' in secondary schools in Baringo North Sub-county is accepted. This confirms the influence of external factors of adolescents' popularity on academic performance of students' in secondary schools in Baringo North Sub-county.

3.3.2 Multiple regression equation

The following multiple regression model was specified

$$Y = -0.070 + 0.439\ X_1 - 0.269X_2 - 0.166X_3 + 0.976X_4 + \varepsilon$$

When there is a unit increase in parental influence and time management, academic performance of students' in secondary schools in Baringo North Sub-county will increase by 0.439 and 0.976 units respectively. When there is a unit increase participation in sports and teachers influence academic performance of students' in secondary schools in Baringo North Sub-county will decrease by 0.269 and 0.166 units respectively.

4. Discussion

4.1 Descriptive statistics of external factors of adolescents' popularity

Descriptive statistical analysis was used to analyze elements of external factors of adolescents' popularity (parental influence, time management, participation in sports, teachers influence).

4.1.1 Elements of time management

The study established that popular student often values free time, usually studies without personal study timetable and usually does not complete assignment on time. In support of

these study findings, conducted a related study and found out that Indian adolescents portrayed a greater prevalence of the use of electronic media and telecommunication gadgets such as watches and TVs, reflecting a larger engagement in sedentary activities than in cultural, community and physically demanding leisure activities [31]. Consequently, affirmed that popular adolescents spend more time under taking activities like going out or hanging around with friends than spend time doing homework and that adolescents who hang around in the mall all the time are more popular than adolescents who spend most of their time alone for example studying [3]. In tandem with these results, looked into adolescent's daily activities and found that they spent more time talking to their friends than engaging in any other activity and thus, in a typical week, high school students will spend twice as much time with their peers as with adults which has a potential in influencing their academic performance [23].

4.1.2 Elements of teachers influence

The study established that popular student has teachers believing in them, is mostly referred as role model by teachers and usually appointed to leadership responsibilities. In support of these study findings, established that teachers have an influence on how students perform in different subjects [26]. Though their findings revealed that there is more encouragement on boys than girls in mathematics pursuits but stress literature more for girls. In addition, teachers and schools deliver a number of gender related messages to children. Similarly, found out that teachers offered an important role in shaping students' engagement since there was a positive teacher–student relationships which led into more behavioral engagement over time, whereas negative teacher–student relationships, higher likeability and higher popularity were related to less behavioral engagement over time [6].

4.1.3 Elements of participation in sports

The study established that popular student always enjoys sport activities. In tandem with these findings, observed that an adolescent's popularity is associated with some evidence of good social-economic background and some ability at games, sports and athletics [17]. Similarly, affirmed that adolescents may feel increased pressures to be active in sports in small schools because fewer students are available to participate [1]. Conversely larger schools may actually have fewer opportunities and more uninvolved students.

4.1.4 Elements of parental influence

It was established that popular student parents encourage good discipline, popular student parents are punctual in attending school academic activities, popular student is always punctual in attending religious activities and popular student parents pay fee per term or year. In tandem with these results, observed that parenting styles, discipline techniques, involvement with their children and the home environment have been shown to affect a child's ability to academically achieve and that even though an adolescent does not use cigarettes or alcohol and has a best friend who uses cigarettes or alcohol [32], research has shown that peer influence was relatively small and was mediated by family factors, such as parental monitoring. In addition, noted that parents' supervision and school involvement and recognition are significantly and negatively associated with low school commitment and individual conflict attitude, which are important protective factors in reducing adolescents' risk of problem behaviours and promoting academic resilience [16]. Similarly, family cohesion has been linked to better physical, emotional, and educational well-being among children and adolescents, and also lower levels of aggression and depression as affirmed by [14].

4.2 Descriptive statistics of academic performance of popular students

The academic performance of students in public secondary schools in Baringo North Sub-county trend analysis portrayed an increasing trend from form one to form four. In support of these study results, established that perceived popularity was significantly related to social intelligence [18], but not to academic achievement, in both contexts. However, sociometric popularity was predicted by an interaction between academic achievement and social intelligence, further qualified by school context. Contrast to this, established that performance in academic lifecycle of an adolescent demands all facets of mental well-being including psychological, social, emotional, spiritual and physical wellbeing [12].

4.3 Inferential statistics

4.3.1 Autocorrelation tests for external factors

The results revealed that the Durbin-Watson statistic is 1.533 which is between 1.5 and 2.5 and therefore the data used in the study was auto correlated [27]. These results are in agreement with the observations of [2] who established an autocorrelation between the external factors towards an adolescent's academic achievement. Therefore, an increase in the independent variable (external factors of adolescents' popularity) would lead to an increase in dependent variable over time.

4.3.2 Multi-collinearity test for external factors

The results indicated that there was no multi-collinearity as between the variables involved. This was in agreement with the rules discussed by research methodology experts [35].

4.3.3 Correlation matrix

The study results revealed the existence of a statistically significant relationship between external factors of adolescents' popularity and academic performance of students. Therefore, this confirms the influence of external factors of adolescents' popularity on academic performance of students in public secondary schools in Baringo North Sub-county. This echoes the study done by [24] on factors affecting Students' academic achievement in Zimbabwe's Rural Secondary Schools where they found out that internal and external factors of adolescents' popularity significantly influence academic achievement in secondary schools. Similarly, in support of these findings, a related study conducted by [11] revealed that external factors of adolescents' popularity significantly

influenced students' academic performance in secondary schools.

4.3.4 Multiple regression analysis

4.3.4.1 Influence of external factors of adolescents' popularity on academic performance of students in public secondary schools

The study results indicated that parental influence, time management, participation in sports and teachers influenced academic performance in secondary schools. In support of these findings, on external factors of adolescents' popularity like peer pressure, parental influence and student involvement in participation in sports, school engagement and academic achievement during adolescence where they established that external factors of adolescents' popularity significantly influence academic achievement of students during adolescence [10]. Also, in line with these study findings, while carrying out a related study [25; 20], observed that peer group has a lot of influence on students' academic achievement in that the nature of a peer group determines the impact on the motivation of and achievements of its member. He further suggests that one group may have a negative impact on its members while the other may have positive impact on its members as well. Therefore, the multiple regression results above generally indicate that parental influence, time management, participation in sports and teachers influence have a statistical significant influence on academic performance of students' in secondary schools in Baringo North Sub-county.

5. Conclusion

External factors such as parental influence, time management, participation in sports, teachers' influence had an influence on academic performance of students.

Adolescents spent most of their time watching TV and hanging out with friends or engaged in behaviors that are valued by their peers and are less likely to take time to do their homework. Teachers influence on how students performed in their different subjects.

Parental influence, discipline techniques, involvement with their children and the home environment had an influence on student's academic achievement in public secondary schools in Baringo North Sub-county.

6. Recommendations

As indicated from the findings of the study that external factors of adolescents' popularity influence the academic performance of students' in secondary schools in Baringo North Sub-county it is therefore necessary that government through the ministry of education should come up with policies that protect the students from the effects of external factors that directly influence academic performance of students in secondary schools in Kenya.

7. Acknowledgement

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