

Relationship Between Dispositional Optimism and Academic Achievement Among Pupils in Public Primary Schools in Nakuru County, Kenya

Kaburu Joel Bundi
PhD Student, Kenyatta University

Dr. Doyne Mugambi, PhD, Educational Psychology Department, Kenyatta University

Dr. Peter. A.M. Mwaura, PhD, Educational Psychology Department, Kenyatta University

Abstract

Persistent poor academic achievement in national examinations among pupils from public primary schools in Nakuru County has been considerably unsatisfactory and detrimental to the learners due to loss of educational and life rewarding opportunities. Educational research within the county with regard to the consistent huge failure rate in the past decade has majorly attributed the huge failure to school-related environmental factors. This is while little attention has been paid to psychological domains of the learners in this county. To address the continuous decline in performance, the study focused on dispositional optimism, an individual difference variable, that is considered to be key in influencing academic achievement of learners. The study was based on dispositional optimism theory. The study adopted convergent parallel mixed research design. The target population was 50750 standard eight pupils enrolled in all the 747 public primary schools in the county while the accessible population was 1364 class eight pupils from 16 public primary schools. The study sample comprised of 400 standard eight pupils selected from 16 public primary schools. Stratified and simple random which are probability sampling procedures and purposive sampling which is a non-probability sampling procedure were used in the selection of the schools and the participants. Questionnaires and interview guide were used to collect data. A pilot study was conducted among 30 class eight pupils to establish the validity and reliability of the research instruments. The study used both descriptive and relevant inferential statistical procedures to analyze the data. The results showed that dispositional optimism and academic achievement had a moderate, positive and significant correlation, $r(366) = .31, p < .05$. Qualitative results also revealed that high dispositional optimism was associated with high academic achievement and vice versa. The study recommends that teachers should be encouraged to build the capacity of the pupils in the primary schools so that they can be more optimistic in their academic endeavors for better achievement in academics.

Keywords: Academic achievement; Dispositional optimism; Public primary school

Date of Submission: 11-09-2022

Date of Acceptance: 28-09-2022

I. Background to the Study

Globally, the overriding goal of all efforts in education systems is to raise the level of learners' success. In pursuit of this goal, stakeholders' attention is directed towards raising the efficiency and effectiveness of the teaching-learning process. Cumulative research on these instructional areas has been conducted by teachers, psychologists, educational researchers, guidance and counseling professionals but the available findings on factors that can related to academic outcomes are still inconsistent and largely inconclusive.

Generally, in many education systems the early stage of transition to primary school is marked by a myriad of challenges, some of which persist throughout the learner's academic development path (Emsley, 2020). Institutional and contextual factors interact with psychological factors to mediate and influence how learners adapt to school experience, which in turn affect directly or indirectly their long term academic attainment. This study focused on the relationship between dispositional optimism (an individual –difference variable) and academic achievement.

Rafiq and Adil (2022) viewed dispositional optimism as a relatively stable psychological quality and a positive personality trait while Papworth and Turvey (2019) regarded dispositional optimism as an individual's general positive expectations for the future. Still, Nes and Sergerstrom (2006) noted that whilst optimism may be dispositional, it can be learned since it has less inherent aspects than some of other dispositional traits and as

such is responsive to interventions and can even be influenced by environmental factors, including family environment. Dispositional optimism performs a self-regulatory function and helps development of personal resources such as goal-fulfilling expectations, enhanced motivation, resilience, hope and enthusiasm, thus helping in determining whether a learner will have the purpose and sense of confidence to initiate or maintain working towards desired goals (Fernanda & Ana, 2017; Magnanom et al., 2015). Walvoord and Schleinkofer (2019) noted that failure may occur in workplaces and schools when talents, skills and interest are present but dispositional optimism is lacking.

Kenya Certificate of Primary Education (KCPE) is the first public examination in the Kenyan education system and is administered by Kenya National Examination Council (KNEC) to class 8 candidates when completing the primary school cycle. Mutweleli (2014) posits that learners' failure in national examinations has adverse consequences which are long term since they miss opportunities to further their education leading to loss of rewarding life opportunities. The society, too, may be in deficit of skilled human capital joining the world of work who are required for sustainable wealth production and socio-economic transformation (Sessional Paper, 2019).

Based on 2015-2021 KCPE statistics, out of the total candidates who sat for the examination in each of these years nationally, over 50% failed, the failure rate being interpreted as those who score less than 250 marks. A large proportion of the failure has been registered from the public primary schools. Analysis for KCPE 2015-2021 reveal that Nakuru County is among the counties in Kenya where many candidates in public primary schools have been obtaining low marks in KCPE, with average failure rate for 2015-2021 KCPE being at 48.9% which is only 2% above the national failure rate of 50.9%. The huge proportion of failure rate reflected in the skewed distribution towards the lower scores denies the pupils opportunities to develop their educational potential further (KCPE 2015-2021).

Notably, findings from research conducted in the last decade by teachers, psychologists, educational researchers, guidance and counseling professionals in Nakuru County have mainly focused on institutional and contextual factors, such as, learning resources, type of school, parental support and teachers' roles (Awour 2019; Matunga et al., 2019). Yet, learners' psychological domains that may have immense influence in improving the persistent low KCPE pass rate has received little or no attention.

Still, most research conducted nationally in the last decade on the influence of psychological constructs on academic outcomes has focused largely on self-efficacy, academic identity status, self-handicapping and defensive mechanisms, self-regulated learning, academic buoyancy, academic motivation, academic resilience, causal attributions, academic self-concept and examination anxiety (Collie & Martin, 2019; Ileri, 2015; Mukolwe, 2015; Mutweleli, 2014; Wawire, 2010). Yet, some other crucial psychological factors that may immensely contribute to pupils' academic success like dispositional optimism have not been given much attention.

Most of the available research findings on the variables studied are largely from developed countries and it was necessary to expand the research and examine the relationship between dispositional optimism and learners' academic achievement in a developing country. Further, there are scanty studies in Kenya that have examined the relationship between pupils' dispositional optimism and academic outcomes. Therefore, this study aimed to establish the relationship between dispositional optimism and academic achievement of primary school pupils in Nakuru County.

II. Statement of the Problem

Thousands of standard 8 pupils sit for KCPE every year when completing the primary school cycle. However, in the last decade, KCPE pass rate in Nakuru County has consistently been low. In this County, though the overall KCPE mean score for the county in the last decade was slightly above the national average, candidates in some primary schools have been obtaining bottom range marks (100 and below and 101 to 200), with a large proportion (87%) being from the public primary schools (KCPE 2015-2021). Educational research within the county has majorly attributed the huge failure to school-related environmental factors, including parents' socioeconomic status, staffing levels, parental roles, type of school, leadership styles, attitude towards school subjects and ineffective guidance and counseling- with more focus on secondary schools. Little attention has been paid to psychological domains of the learners in this county with regard to the consistent huge failure rate. This trend denies the affected pupils' opportunities for higher education which ought to be pathways to their world of work. In the long term, the county and the country at large may have a deficit of skilled human capital required for sustainable wealth production. One of the psychological factors considered to be critical variables in influencing pupils' academic achievement is dispositional optimism (individual-difference domain). The present study, therefore sought to examine the relationship between dispositional optimism and academic achievement to bridge the gap.

III. Objective of the Study

The study aimed to establish the relationship between dispositional optimism and academic achievement.

IV. Review of Related Literature

A number of studies have been conducted to examine the relationship between dispositional optimism and academic achievement. A three-phases, one-year longitudinal study by Ruthig et al. (2004) on effects of dispositional optimism on academic achievement among a sample of 236 university students (156 females, 57 males, 23 gender not specified) revealed that high dispositional optimism students performed significantly better than low dispositional optimists and exhibited greater persistence in college courses. The sampled students were aged between 17 and 42 years and were enrolled in psychology course in the University of Manitoba. Kaniel (2012) reported similar results with college samples.

A study by Iro et al. (2017) also found a positive and significant correlation between dispositional optimism and academic performance. The study established that when students have high levels of dispositional optimism, they performed better in academics compared to those who had low levels of dispositional optimism. The research was done among 378 undergraduate students in Nigeria.

Another research conducted in Italy by Buzzai et al. (2020) investigated how dispositional optimism was associated with well-being in school among students. A sample of 218 students aged from 16 years to 19 years were involved in the study. Majority of the respondents came from medium and high SES. Dispositional optimism of the students was assessed using a life orientation test. To test the relationship, the data were subjected to regression analysis. The results showed that dispositional optimism significantly predicted the well-being of students in school.

In another study by Ickson et al. (2019) found that despite the fact that optimistic expectations frequently improve students' academic achievement, it can moreover contribute to student's failure if accompanied by unlikely expectations of achievement. The study looked at how personality factors such as conscientiousness and gender influenced the relationship between dispositional optimism and academic achievement. To achieve this, a total of 175 undergraduates' (123 women, 52 men) levels of dispositional optimism and conscientiousness levels were evaluated as predictor variables of their average academic score. The results from multiple hierarchical regressions confirmed that conscientiousness and gender have a moderating effect on the association between dispositional optimism and academic success. Results from post-hoc analysis revealed that high dispositional optimism improved educational outcomes in women with high cognition while having a negative effect on academic achievement in men with low conscientiousness. These results imply the possibility of high conscientiousness to counteract negative impacts of increased optimism, for example unreasonable potentials and overconfidence.

A study done in Sicily, Italy by Buzzai et al. (2020) on the well-being or depressed mood has piqued the interest of the literature. However, little research has been conducted to determine the relationship among both well-being and loss of hope and the infused and dispositional variables. The study sought to investigate the relationship between some contextual interpersonal interactions (dispositional optimism) and academic achievement, general well-being, and school helplessness in adolescent students. The findings revealed that need-supportive personal and social conduct, attitudinal hopefulness, positive affectivity, and flexible explanatory style all predicted general well-being, while negative affectivity predicted it negatively. Meanwhile, need-thwarting intra - personal conduct, negative affectivity, and dysfunctional behavior all predicted school helplessness. There was need for a similar research to establish if this would be the same in the Kenyan context among primary school pupils.

A study by Vizoso et al. (2018) investigated how coping techniques, dispositional optimism, academic burnout influenced academic achievement. A total of 532 Spanish undergraduate students were selected for data collection. Participant's data were collected through questionnaires; the LOT-R to gauge optimism, the CSI to assess coping mechanisms both adaptive and maladaptive coping mechanisms, and the MBI-SS to assess academic burnouts of exhaustion, cynicism and efficacy. The students grade point average was calculated to assess academic achievement (GPA). Academic burnout was found to have direct and positive association with maladaptive coping, although adaptive coping was found to be directly and adversely connected with academic burnout. Furthermore, optimism deemed to be a substantial and unfavorable forecaster of emotional tiredness. Finally, academic burnout was also found to be a significant predictor of academic achievement. Furthermore, the results showed that adaptive coping and optimism both aid in the prevention of academic burnout and, as a result, had a positive impact on academic achievement.

Still, a cross-sectional study by Schumacher (2006) reported that dispositional optimism had no predictable effect on academic outcomes. Shumacher (2006) study comprised a gender-imbalanced small sample size of 48 (33 females, 15 males) high school students compared to a population of 1384, used General Self Efficacy (GSE) Scale rather than Life Orientation Test-R as she assumed that GSE is a direct measure of dispositional optimism and that self-efficacy is highly associated with academic outcomes. On the other hand,

the study by Conner et al. (2012) comprised a convenient cluster sample of 105 where sophomores were under-represented compared to the other years of undergraduate students and still the researchers asked students to self-report their Grade Point Average (GPA) instead of obtaining them from institutions' records. Regionally and locally, only a few, such as the fore-discussed studies may have directly examined the relationship existing between dispositional optimism and academic achievement of primary school pupils or any other level. In the present study, convergent parallel mixed method research design was used, probability sampling procedures were followed, LOT-R was applied, GPA was obtained from school records and it was a one-time study with a larger and more homogenous sample drawn from primary school level.

Tetzner and Becker (2018) conducted a study to establish the relationship between optimism and academic achievement among adolescents. The study looked at the functional form of the relationship, whether beginning accomplishment level moderated it, and compared the results to the impact of self-esteem. The study was done on a large German sample of 6,010 students (baseline age = 14.1) during a 5-month period with two measurement points in the middle and at the end of 7th grade. Three main discoveries emerged from the estimation of LOESS curves as well as latent change-regression models. The study concluded that optimism triggered academic achievement. However, this association reached a plateau in above-average optimism ranges and a minimum value in below-average optimism ranges. High optimism had a higher favorable effect for high-achieving adolescents when the achievement level was mitigated. Optimism, on the other hand, had a generally beneficial outcome on self-esteem. Findings add to the body of research on the outcomes of optimism by relating it to academic success among early teens, however the effects are weak and nonlinear. This called for additional research and the current study sought to bridge this gap.

V. Methodology

5.1 Research Design and Target Population

The study adopted convergent parallel mixed research design to investigate the relationship between dispositional optimism and pupils' academic achievement. According to Creswell and Creswell (2018) in this design, quantitative and qualitative data are collected at the same time and then the results are merged to test the research hypotheses. This design is appropriate because it allows for in depth analysis of the research problem.

The target population comprised of all the 50,750 (25,462 Boys and 25,288 girls) standard eight public primary school pupils from 767 schools in Nakuru County who were projected to undertake KCPE in 2021. The accessible population was 1364 class eight pupils from 16 public primary. The choice for inclusion of the schools in the study was based on the consideration that they had presented pupils in the past three national examinations (2018, 2019 and 2020).

5.2 Sampling Techniques and Sample Size

The study used three types of sampling procedures; purposive sampling, stratified sampling and simple random sampling to ensure representativeness of schools and participants. A sample size of 16 schools was obtained from the 767 public primary schools in Nakuru County using the formula recommended by Nassiuma (2000). Purposive sampling was used to select 16 schools with large population. The 16 schools that were purposively selected were further stratified to ensure representativeness. The schools were stratified into two categories representing day schools and boarding schools. A school was considered boarding if class seven and eight pupils were accommodated within the school. Three boarding schools and thirteen day schools were selected using simple random sampling. Thus, sixteen schools were used in the study.

5.3 Research Instruments

a) Dispositional Optimism Scale; An Adapted Life Orientation Test - Revised, LOT-R

The Life Orientation Test – Revised (Scheier, Carver & Bridges, 1994) is a 10 – item measure with 4 filler items and 6 scale items, of which 3 are positively–recorded items, and 3 are reverse-coded items. To measure dispositional optimism using Life Orientation Test – Revised (Scheier, Carver & Bridges, 1994), respondents were asked to indicate their level of agreement with each of the items on a 5-point scale (from agree a lot to disagree a lot) which gave a possible score range of 6 to 30. Total scores were calculated by adding the 3 positively worded and the 3 negatively worded items (reverse coded). The lowest score was 14 and the highest was 30. Based on the scores, dispositional optimism of the student was categorized into three; low (6-14), moderate (15-22) and high (23-30). The higher the score in the overall scoring rate, the higher the dispositional optimism (Scheier, Carver & Bridges, 1994).

b) Interview Schedule

An in-depth interview was used in the study in order to complement the participants' quantitative data collected in the LOT-R sub scale which allowed deep analysis of the research problem.

c) Pupils' Academic Achievement Proforma

Document analysis of school records, such as mark books, provided the individual pupil's academic achievement, in terms of aggregate score obtained from the five subjects examined for the term one examinations, year 2021. The participant's score was recorded in the proforma table that was designed specifically for this purpose. To render these scores comparable among the sixteen different schools, the scores were transformed first to Z-scores and then to T-scores. The scores were categorized into three levels namely; low (0-40), average (41-60) and high (60 and above).

5.4 Data Collection Procedures, Analysis and Presentation

Once the research permit was obtained from National Commission for Science, Technology and Innovation (NACOSTI) and permission was granted by head teachers to visit the selected schools, the researcher administered the questionnaires during the normal lesson time. The researcher gave the participants' instructions on how to complete the LOT-R scale. The participants took approximately 40 minutes to complete the questionnaire. The class teachers for standard eight pupils were asked to provide academic achievement records, such as mark books, to enable the researcher obtain the participant's subjects' and aggregate scores from the five subjects examined at the end of the term one, year 2021.

SPSS was used to analyze the quantitative data obtained from the respondents' questionnaire. The results were presented using both descriptive and inferential statistical methods. Specifically, descriptive statistics such as frequencies, percentages, means and standard deviation were used to analyze quantitative data. Qualitative data were analyzed using thematic analysis. Significance of each null hypothesis was tested using relevant inferential statistical procedures.

VI. Results and Discussions

The objective of this study was to find out the relationship between dispositional optimism and academic achievement.

6.1 Descriptive Statistics of Dispositional Optimism and Academic Achievement

Table 1: Dispositional Optimism Descriptive Statistics

	<i>N</i>	Range	Min	Max	Mean	<i>SD</i>	<i>Sk</i>	<i>Kur</i>
Dispositional Optimism	368	16.00	14.00	30.00	22.79	3.43	-0.28	-0.05

The range of dispositional optimism scores of the pupils was 16.00 with the minimum score being 14.00 and the maximum score being 30.00. The mean score and standard deviation were 22.79 and 3.43 respectively. Skewness and kurtosis coefficients indicate that the scores were approximately normally distributed.

Table 2: Levels of Dispositional Optimism

	Frequency	Percent
Low	33	9.0
Moderate	176	47.8
High	159	43.2
Total	368	100.0

The respondents with low dispositional optimism were 33 translating to 9% while those with moderate dispositional optimism were 176 (47.8%). Those with high dispositional optimism were 159(43.2%). The results showed that majority of the students had moderate level of dispositional optimism.

Academic achievement of the students was measured using the marks they scored at the end of term one examination in 2021. This section presents the descriptive statistics of the scores of academic achievement.

Table 3: Descriptive Statistics of Academic Achievement

	<i>N</i>	Range	Minimum	Maximum	<i>M</i>	<i>SD</i>	<i>Sk</i>	<i>Kur</i>
Standardized scores of academic achievement	368	42.52	27.52	70.04	49.95	10.03	0.28	-0.93

The range of the scores was 42.52 (minimum =27.52 and maximum=70.04). The mean score was 49.95 with standard deviation of 10.03. The skewness coefficient was 0.28 while the kurtosis coefficient was -0.93. This suggested that the scores were near normal distribution.

Academic achievement scores were categorized into levels and the results are presented in Table 4.

Table 4: Levels of Academic Achievement

	Frequency	Percent
Low	65	17.7
Moderate	233	63.3
High	70	19.0
Total	368	100.0

As seen in Table 4, less than a quarter (17.7%) of the respondents had low level of academic achievement. A majority representing 63.3% of the respondents had moderate level of academic achievement while 19% of the pupils had high level of academic achievement. Generally, most of the participants had moderate level

6.2 Hypothesis Testing

The study hypothesized that there is no significant relationship between dispositional optimism and academic achievement. The hypothesis was tested using Pearson correlation and the results are presented in Table 5.

Table 5: Correlation Between Dispositional Optimism and Academic Achievement

		Academic Achievement
Dispositional Optimism	Pearson Correlation	.31**
	Sig. (2-tailed)	.00
	N	368

The study established that dispositional optimism and academic achievement had a moderate, positive and significant correlation, $r(366) = .31, p < .05$. Therefore, the study rejected the null hypothesis. The results suggest that an increase in dispositional optimism leads to an increase in academic achievement and vice versa. Dispositional optimism was categorized into three levels and therefore further analysis was conducted to establish how the students performed based on the level of dispositional optimism and the results were as shown in Table 6.

Table 6: Levels of Dispositional Optimism and Academic Achievement

Dispositional Optimism Levels	N	Academic Achievement Mean Score	Std. Deviation
Low	33	44.82	9.19
Moderate	176	48.30	9.23
High	159	52.84	10.25
Total	368	49.95	10.03

The pupils with high level of dispositional optimism were 159 with the highest mean score of 52.84 ($SD = 10.25$). Those with moderate level of dispositional optimism scored a mean of 48.30 ($SD = 9.23$). Pupils with low level of dispositional optimism scored the lowest mean score of 44.82 ($SD = 9.19$). A majority of the pupils had a moderate followed by high levels of dispositional optimism.

Forty pupils (40) were interviewed and the findings on the levels of dispositional optimism are presented in Table 7 below.

Table 7: Levels of Dispositional Optimism by Sex

		Sex of the Pupil		Total
		Boy	Girl	
DO Levels	Low	2(5%)	3(7.5%)	5(12.5%)
	Moderate	9(22.5%)	5(12.5%)	14(35%)
	High	10(25%)	11(27.5%)	21(52.5%)
Total		21(52.5%)	19(47.5%)	40

The results indicate that 52.5% of the respondents were boys while 47.5% were girls. Out of the five pupils (12.5%) who had low dispositional optimism, 5% were boys while 7.5% were girls. Among those who had moderate dispositional optimism, 22.5% were boys while 12.5% were girls, a total representation of 35%. The pupils who had high dispositional optimisms were the majority represented by 52.5%, where 25% were boys while 27.5% were girls.

The responses of selected pupils who were interviewed are presented.

Olpha- On general questions, when she was asked what other subjects other than the usual five subjects which are Mathematics, English, Kiswahili, Science and Social studies that everyone else took, she said that she did physical education (P.E), Life Skills (L/S) and Creative Arts. She said that non-examinable subjects were

important to her. If she could have been given a chance to drop the non-examinable subjects at that point, she could not have dropped them. On what career she could wish to get into after completing her education, she said that she wanted to become a teacher. Her plans after primary education were to go to high school. When asked how she expected to perform in academics she said 'high' but also indicated that the additional subjects would most likely lower her academic performance. Whenever she was faced with challenges in life, she made efforts to overcome them and she did not prefer to ignore and forget some difficult situations. Olpha indicated that she expected to overcome difficult situations in her life and she did not give up when faced with difficult situations. This indicated that the respondent had high level of dispositional optimism.

Raphael- This respondent indicated that he does the three non examinable subjects and deems them important that if given a chance he still cannot drop them. He wants to become a judge after completion of his studies and would love to go to a good school after his primary school studies. If the government of Kenya makes all the subjects examinable, Kibet has a high expectation that he will perform well and that the three added subjects will not make his performance to drop. Whenever Raphael faces challenges, he tries to overcome them and usually he prefers ignoring or forgetting some difficult situations and one thing about him is that he expects to overcome difficult situations in his life. He also said that he does not give up no matter how hard the situation is. The responses provided by Kibet indicate that he had moderate level of dispositional optimism. His academic achievement was also moderate. The results corroborate quantitative data results which showed that that there was a positive relationship between dispositional optimism and academic achievement.

Mary - Said that the other non-examinable subjects are important to her and would not drop any of them at any given point. Her career wish is to become a surgeon and to help her family and friends is part of her plans after she is through with schooling. She expects to perform well in the added subjects in case the government makes them examinable. Mary indicated that she does not expect the additional subjects to lower her performance. When Mary faces challenges, she makes attempts to solve them and at times prefers ignoring and forgetting some difficult situation rather than giving her effort to it. She expects to overcome any difficult situation in her life because he is strong willed that she does not give up when faced with difficult situations. The results obtained indicate that she had moderate level of dispositional optimism. The academic performance of the student was also average.

To establish if the mean differences in academic achievement based on the level of dispositional optimism were statistically significant, the researcher conducted one-way ANOVA and the results are presented in Table 8.

Table 8: ANOVA for the Mean Score Differences in Academic Achievement

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2670.00	2	1335.00	14.23	.00
Within Groups	34233.63	365	93.79		
Total	36903.63	367			

The mean differences in academic achievement among pupils with different levels of dispositional optimism were statistically significant, $F(2, 365) = 14.23, P < .05$.

6.3 Discussion of the Results

In the first objective of this study, the researcher aimed to find out the association between dispositional optimism and academic achievement. The research found that the two variables were significantly related. The findings of this study also revealed that the mean differences in academic achievement among pupils with different levels of dispositional optimism were statistically significant, $F(2, 365) = 14.23, P < .05$. This confirmed that academic achievement is significantly related to dispositional optimism. These results were consistent with the findings of earlier studies conducted in this area. Icekson et al. (2019), in their research on "Does optimism predict academic performance?" found that optimism significantly predicted academic achievement. On exploring the moderating role of conscientiousness and gender, the study found that high dispositional optimism increased academic performance in women with high conscientiousness. They however found out that high dispositional optimism had adverse effects on academic performance of men with low conscientiousness.

Another study done by Buzzai et al. (2020) that investigated the relationship between contextual (need-supportive interpersonal behavior and need-thwarting interpersonal behavior) and dispositional variables (dispositional optimism, positive/negative affectivity, explanatory style), well-being and hopelessness in school context came up with similar findings. Their findings revealed the existence of a positive association between contextual and dispositional variables, academic achievement, general well-being, and school hopelessness in adolescent students. The sample size for this study was 116 females and 102 males, 128 respondents. Relatedly, Toor (2009) in his investigation on optimism and achievement, arrived at a similar conclusion as that of the current study. The researcher found out that dispositional optimism was a strong predictor of academic

achievement. This conclusion implied that the greater the optimism the greater the academic achievement. The sample size for this study was 292 (130 male respondents and 162 females) college students. The results also confirmed that regardless of the level of study, optimism is pivotal in academic achievement.

Schumacher (2006) also reported similar results in a study that assessed the relationship between optimism and academic success. The results revealed there was no notable mean differences in optimism and performance for boys and girls. The mean for males was 32 while females had 31. Differences in grade level for the students was also tested to check if there was any significant difference between students at different levels of studies. Again, there was no outstanding mean differences in optimism and grade level. Grade 10 students had a mean score of 32.8 while grade 11 had 31.4 and grade 12 had 31.5. Similar findings were obtained for the different grades when further analysis was done using ANOVA test. These findings were supported by the findings of the current study. Another study by Iro et al. (2017) also found a positive and significant correlation between dispositional optimism and academic performance. The study established that when students have high levels of dispositional optimism, they performed better in academics compared to those who had low levels of dispositional optimism. The research was done among 378 undergraduate students in Nigeria. The study further revealed that there was no significant difference in dispositional optimism between boys and girls. The results demonstrate that dispositional optimism is an important factor in learning and school achievement. Based on the results, the level of learning does not affect the relationship between dispositional optimism and academic achievement because the current study involved a sample of primary school pupils while Iro et al. study involved university students.

VII. Conclusion

This study aimed at establishing how dispositional optimism correlate with academic achievement. The results did not support the null hypothesis of the research that there was no significant correlation between dispositional optimism and academic achievement. This study found a moderate, positive and significant correlation between dispositional optimism and academic achievement. Increase in dispositional optimism was associated with increase in academic achievement and vice versa. This implies that if a pupils' dispositional optimism is enhanced and it will lead to improvement in academic achievement.

VIII. Recommendations

The study found that there was a significant correlation between dispositional optimism and academic performance. Because dispositional optimism is a psychological construct which can be learnt, it is recommended that the teachers be trained on how to build the capacity of the pupils in the primary schools so that they can be more optimistic in their academic endeavors. The MOE should incorporate capacity building programs in schools to enhance dispositional optimism of learners for better learning outcomes.

This study was only conducted in Nakuru County. The results cannot therefore be used to generalize the rest of the 46 counties of Kenya because dispositional optimism is influenced by contextual factors. Therefore, further research is necessary in other counties to establish the influence of dispositional optimism on pupil's academic achievement for more conclusive findings.

References

- [1]. Awour, E. (2019). The role of strategic leadership on academic performance of secondary schools in Kenya: A case Study of Nakuru County. *Journal of Human Resource and Leadership*, 3(2), 94-110.
- [2]. Buzzai, C., Sorrenti, L., Orecchio, S., Marino, D., & Filippello, P. (2020). The relationship between contextual and dispositional variables, well-being and hopelessness in school context. *Frontiers in Psychology*, 2319.
- [3]. Collie, R. & Martin, A. (2019). *Motivation and engagement in learning*. Oxford University Press 2019. <https://doi.org/10.1093/acrefore/9780190264093.013.891>
- [4]. Conner, T. W., Skidmore, R. L., & Aagaard, L. (2012). College student dispositional optimism and academic self-efficacy. A paper presented on line at Mid- South Educational Research Association Morehead State University, Lexington on November 9, 2012. Retrieved 16, 2016 from <http://eric.ed.gov/?q=&eff=dtv>.
- [5]. Creswell, J. W. & Creswell, D. (2018). *Research design: qualitative, quantitative, and mixed methods approaches* /. SAGE. <https://cmc.marmot.org/Record/.b57516595>
- [6]. Emsley, M. (2020). Teachers View On Double Transition in Grade 4. *Journal of African Education JAE*, 56(6), 163-184.
- [7]. Fernanda, O., & Ana, P. N. (2017). Factor structure of the Life Orientation Test- Revised (LOT-R). *Act.colom.psicol.* 20(3), 1-9. Bogota. Retrieved September 20, 2018 from <http://dx.doi.org/10.14718/ACP.2017.20.1.3>.
- [8]. Ickson, T., Kaplan, O., & Slobodin, O. (2019). Does optimism predict academic performance? Exploring the moderating roles of conscientiousness and gender. *Studies in Higher Education*, 45(3), 635-647.
- [9]. Ileri, A. M. (2015). *Academic identity status and achievement goal orientation as predictors of academic achievement among form three students in Embu County, Kenya*. (Unpublished PhD Thesis). Kenyatta University, Nairobi.
- [10]. Iro, B., Mahmoud, K., Mohammed, A., Balarabel, M., & Balarabe, M. (2017). Relationships among School Adjustment, Dispositional Optimism and Academic Achievement between Male and female Undergraduate Students in North West Zone, Nigeria 1. *International Journal of Educational Research and Management Technology (IJERMT)*, 2(3), 2545-5877. <https://casirmediapublishing.com/wp-content/uploads/2019/10/Pages-159-172.pdf>

- [11]. Kaniel (2012). Optimism versus pessimism and academic achievement evaluation. Yifat Harpaz- Ilan University, Israel. Retrieved October 23, 2016 gei. sagepub.com.
- [12]. Magnanom, P., Paolillo, A., & Giacominielli, B (2015). Dispositional optimism as a correlate of decision-making style in Italian adolescents. Retrieved September 20, 2017 from Sage and Open Access page <http://www.uk.sagepub.com/aboutus/openaccess.htm>: DO. 10.1177/4015592002/215824.
- [13]. Matunga, J. (2019). Effects of interventions of selected reading difficulties on academic performance among pupils from primary schools in Nakuru West Sub County, Nakuru County (Masters Project). Kenya Methodist University.
- [14]. Mukolwe, A. N. (2015). Selected correlates of examination anxiety and academic performance of students in public secondary schools in Khwisero subcounty, Kakamega county, Kenya (Unpublished manuscript). Kenyatta University, Nairobi, Kenya.
- [15]. Mutweleli, S. M. (2014). Academic motivation and self regulated learning as predictors of academic achievement of students in public secondary schools in Nairobi County, Kenya. (Unpublished Ph.D Thesis). Kenyatta University, Nairobi.
- [16]. Nes, L. S., & Segerstrom, S. C. (2006). Dispositional optimism and coping: A meta-analytic review. *Journal of Society for Personality and Social Psychology*, 10 (3), 235-51.
- [17]. Papworth, S. Thomas, R. & Turvey, S. (2019). Increased disposition optimism in conservation professionals. *Biodiversity and Conservation*, 28(2), 401-414.
- [18]. Rafiq, F. & Adil, M. (2022). Explanatory or dispoitional optimism: Which trait predicts eco-friendly behavior?. *Sustainability*, 14(5), 2994.
- [19]. Ruthig, J. C., Perry, R. P., Hall, N. C., & Hladkyj, S. (2004). Optimism and attributional retraining: Longitudinal effects on academic achievement, test anxiety, and voluntary course withdrawal. *Journal of Applied Social Psychology*, 34 (4), 709–730.
- [20]. Scheier, M.F., Carver, C.S., & Bridges, M.W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery and self-esteem). A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67(6),1063.
- [21]. Schumacher, B. (2006). Assessing the relationship between optimism and academic success. (Published Master of Arts Thesis). University of Athabasca, Alberta: British Columbia Press.
- [22]. Tetzner, J., & Becker, M. (2018). Think positive? Examining the impact of optimism on academic achievement in early adolescents. *Journal of Personality*, 86(2), 283-295.
- [23]. Toor, S. (2009). Optimism and achievement: A domain-specific and within-construct investigation. Doctoral Dissertations. https://trace.tennessee.edu/utk_graddiss/637/
- [24]. Toor, S. (2009). Optimism and achievement: A domain-specific and within-construct investigation. Doctoral Dissertations. https://trace.tennessee.edu/utk_graddiss/637/
- [25]. Walvoord, E. & Schleinkofer, N. (2019). Optimism and step 1. Indiana University School of Medicine. Scholarworks.lupui. Edu.
- [26]. Wawire, C. K. (2010). Predictors and consequences of self- handicapping and defensive pessimism among students in selected high schools in Nairobi Province, Kenya (Unpublished doctoral thesis). Kenyatta University.

Kaburu Joel Bundi, et. al. "Relationship Between Dispositional Optimism and Academic Achievement Among Pupils in Public Primary Schools in Nakuru County, Kenya." *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 12(05), (2022): pp. 26-34.