

Emotional Intelligence as a Correlate of Academic Achievement among Form Three Students in Machakos County, Kenya

By

¹Modesta Wairimu Njeri, ²Dr Josephine Mutua and ³Dr Doyne Mugambi

¹Masters' student, Kenyatta University, Kenya. Email: Modestanjeri19@gmail.com

²Dr Josephine Mutua, PhD, Educational Psychology Department, Kenyatta University, Email: mutua.josephine@ku.ac.ke,

³Dr Doyne Mugambi, Educational Psychology Department, Kenyatta University, Email: mugambi.doyne@ku.ac.ke

Abstract

The purpose of this article was to interrogate emotional intelligence as a correlate of academic achievement among form three students in Kenya, using Machakos County as a point of reference, for illustration. The contention of the study was that academic achievement equips individuals with skills that enable them to be productive and innovative. However poor academic achievement has been an issue of concern in Kenya at large and also in Machakos County for the past few years. Poor academic achievement may lead to poor economic growth due to reduced qualified personnel in various economic sectors. Despite numerous studies carried out on academic achievement, very few studies have been done on the relationship between emotional intelligence and academic achievement in Kenya. This study explored the association between emotional intelligence and academic achievement. A sample of 340 students was selected using random sampling technique to participate in the study. The results revealed that emotional intelligence and academic achievement were highly correlated. It was concluded that it is importance to enhance emotional intelligence and metacognition among students to improve their academic achievement. Therefore, it was recommended that teachers and parents should enhance emotional intelligence and metacognition among students. This may have positive impact on their academic achievement.

Key words: Kenya, Emotional Intelligence, Academic Achievement, Students, Machakos County

Emotional Intelligence as a Correlate of Academic Achievement among Form Three Students in Machakos County, Kenya

By

¹Modesta Wairimu Njeri, ²Dr Josephine Mutua and ³Dr Doyne Mugambi

1. Introduction

Academic achievement equips an individual with skills such as creativity and problem solving that enable them to be innovative and productive (Tadese et al., 2022). Success in secondary school education immensely contributes to good career advancement which consequently improves an individual's economic status. Poor academic achievement leads to frustrations among students since they are not able to pursue desired careers in the universities and colleges (Njuguna, 2022). This eventually increases the number of unemployed in the country, reduced qualified personnel in different fields and dependency rate which leads to poor economic growth. These reasons have made governments and researchers across the world to devote themselves to make the quality of education better in their respective nations such as Kenya, USA and Tanzania. The governments have invested heavily on education by setting aside enough funds to ensure education resources are available in schools for example in Kenya's 2022-2023 budget, 544.4 billion was allocated to education making it the biggest beneficiary. Better funding improves the quality of education in a country which promotes academic success. Different tests like the international and national examinations are used to make judgment if learning is taking place effectively and meeting expected educational goals.

Empirical evidence shows that poor academic achievement has become an issue of concern in many countries like Pakistan, Naila et al. (2017), Nigeria, Modupeola et al. (2019), Tanzania, Lyakurwa (2018) and Kenya, Agnes et al. (2021). The countries have reported that students' performances are below the set education standards nationally and internationally. The Kenya National Education Sector plan (NESP) (2018-2022) report indicates that low performance level is an issue of concern in the education sector. For the past three years (2018-2020) more than half of the students got a mean grade of D+ and below, 53.87% in 2020, 61.99% in 2019 and 56.72% in 2018 (KNEC KCSE statistics 2018,2019,2020). This clearly shows that the achievement level is very low among learners. Machakos County is one of the 47 counties that has posted poor academic achievement for the past few years (2018-2021). A very small percentage of students attained grade C+ and above which is the minimum entry to universities. The KCSE mean grade for Machakos County from 2018 to 2021 has stagnated at D equivalent to 3 points out of 12 points indicating poor academic achievement. Kangundo Sub County has posted the lowest mean scores in KCSE (3.163, 3.390 and 3.400) among the 8 sub counties in Machakos County.

Educational researchers have stated that cognitive factors are very significant in improving academic achievement (Liang & Liu, 2020). These factors include but not limited to emotional intelligence. This study focused on emotional intelligence as a determinant of academic achievement. In addition, there is limited literature on these variables. Studies done in

Citation: Njeri, M. W; Mutua, J & Mugambi, D. (2024). Emotional Intelligence as a Correlate of Academic Achievement among Form Three Students in Machakos County, Kenya.. *Journal of Popular Education in Africa.* 8(2), 31 – 40.

Machakos on predictors of academic achievement have focused on school culture, academic engagement and family-based factors (Masila & Ileri, 2022; Ngumuta, 2022; Muiya, 2017).

Emotional intelligence is ability to use and control feelings positively, communicate effectively and manage stress (Mayer & Salovey, 1997). Emotional intelligence has five main components which include: self-motivation, social skills, self-regulation, social awareness and empathy (Jane, 2020). Self-awareness is the ability to understand one's emotions and the consequences of the emotions. Self-regulation is being able to manage emotions and behaviors that come along with them. Self-motivation is the personal drive towards achieving set goals. Empathy is the ability to identify and understand other peoples' emotions. Social skills are a persons' ability to create good relations, communicate with other people and maintain friendships. Emotional intelligence guides a person's thinking and behavior, it helps students to adjust their emotions to adapt to the school environment in order to achieve set goals.

Kalia and Saini (2020) opine that teaching emotional and social skills in schools may have a positive effect on academic achievement. Pishghadam et al. (2022) asserts that emotional intelligence is one of the types of intelligence that is associated with academic achievement. Most studies done on the relationship between emotional intelligence and academic achievement, have been done in other countries with different cultures from those of Kenya. Moreover, the few studies done in Kenya are mostly in other counties which created a need for current study in Machakos County to fill the gap on regional differences. Secondly, the studies done on these variables have contradictory findings. Finally, most studies that have been done on these variables have focused on university students. This sample may produce different results from those of secondary school students because of cognitive and age differences. The current research filled these gaps by exploring the correlation between emotional intelligence and academic achievement among form three students in Machakos County.

2. Statement of the Problem

Academic achievement among secondary school students has been declining for the past few years (2016 – 2021) making it an issue of concern in Kenya. Empirical evidence confirms that the level of academic achievement of most learners is low and below the minimum entry to the higher institutions. Persistent poor academic achievement hinders learners from transiting to higher institutions and colleges hence causing reduction of qualified personnel to support the various sectors of economy. Eventually, this will lead to poor economic development in Kenya and increase poverty rate causing high dependency on government aid. This overwhelms the government and consequently increases the country's debt. To address this challenge, there was a need to understand some of the variables that have a positive impact on learners so as to improve their academic achievement. Despite having this knowledge and numerous studies done, academic achievement level is still low hence the need for more studies.

Based on the background to the study, most research on emotional intelligence and metacognition have been carried out in other countries with different cultures making it difficult to be generalized in Kenya. Little attention on these variables has been given to Machakos County, hence creating a need to carry out this study. In addition, there are contradictory findings on these variables. Therefore, there was a need for this study on emotional intelligence and

Citation: Njeri, M. W; Mutua, J & Mugambi, D. (2024). Emotional Intelligence as a Correlate of Academic Achievement among Form Three Students in Machakos County, Kenya.. *Journal of Popular Education in Africa*. 8(2), 31 – 40.

metacognition as correlates of academic achievement among form three learners in Machakos County.

Review of Related Literature

In Pakistan, Ayesha (2019) conducted a cross-sectional study on emotional intelligence as a correlate of academic achievement of learners. A sample of 420 scholars in bachelor of education in Islamabad University was selected using random sampling technique. The findings showed that emotional intelligence and academic achievement were highly correlated. However, this research was done using a different sample from the current research. There is a notable difference between university students and high school students' cognitive ability. The current research was carried out using secondary school students to fill the gap.

In yet another study, Quiser et al. (2019) conducted a survey on the link between emotional intelligence and academic achievement of learners in Iran. The research was done using a sample size of 223 learners that was chosen using stratified sampling. The findings revealed that emotional intelligence and academic achievement were positively associated. Since University students were the respondents, it was necessary to carry out the current study in Kenya using secondary school students as respondents to fill the gap of age differences between the two groups.

Madhavan et al. (2016) explored the association between emotional intelligence and academic achievement of Business learners in Thailand. 349 participants were chosen using simple random sampling to participate in the research. The findings revealed that emotional intelligence and academic achievement of Business studies were highly correlated. This study focused on the academic achievement of only one subject, the current study considered the overall students' academic achievement.

In yet another study, Ojewola (2022) carried out a study on the link between emotional intelligence and academic achievement of high school learners in Ogbomoso Metropolis, Nigeria. The research was carried out using a sample of 250 learners who were randomly selected. A significant association between emotional intelligence and academic achievement was found. This study used similar sample as the current study. However, there are cultural differences between the samples.

Owan (2022) carried out a study on the association between emotional intelligence and chemistry achievement among high school students in Nigeria. The study was done using 200 students who were selected randomly. The results revealed a significant link between emotional intelligence and chemistry achievement. This study focused on chemistry achievement only while the current study considered the overall students' academic achievement.

Helen et al. (2020) explored the link between emotional intelligence and academic achievement among university upgrading student teacher in Uganda. The research involved 434 scholars who were chosen using purposive sampling. The results revealed that emotional intelligence and academic achievement were not correlated. This study had contradictory findings from other researchers who found a positive relationship. Therefore, created a need to carry out the current study.

Jane (2020) carried out correlational research on emotional intelligence and academic achievement among learners. A total of 390 learners were selected randomly to participate in the

Citation: Njeri, M. W; Mutua, J & Mugambi, D. (2024). Emotional Intelligence as a Correlate of Academic Achievement among Form Three Students in Machakos County, Kenya.. *Journal of Popular Education in Africa*. 8(2), 31 – 40.

research. The research findings revealed that emotional intelligence was associated with academic achievement. This research was conducted in Kiambu County and may be difficult to generalize the results to all counties in Kenya since emotional intelligence of students may vary from one context to another. The current study was done in Machakos County to fill the gap.

Jane et al. (2020) conducted a study on the link between emotional intelligence and academic achievement among high school learners in Kilifi. A sample of 271 students was selected using simple random sampling to participate in the study. The study found that emotional intelligence and academic achievement were highly related. However, since the study was done in Kilifi, it may be difficult to generalize the findings to all counties in Kenya. This created the need for the current study.

3. Research Design.

This study adopted correlational design. Correlational design identifies relationship between variables and is non- experimental. In addition, the independent variables are not manipulated (Kothari ,2019). Correlational design was effectively used by Norehan (2016) in his study on relationship between metacognition and academic performance. Therefore, this design was suitable for this research to correlate emotional intelligence, metacognition and academic achievement.

4. Data Collection Technique

Questionnaires administered to form three students were used to collect data. The researcher gave instructions to the students and explained the reason for carrying out the research to assure the respondents on confidentiality of information given and also gave clarification on the questions. The filled questionnaires were collected by the researcher and appreciated the respondents for their participation. The participants' academic results were obtained from end of term exam from the academics' department.

5. Results and Discussion

6.1 Relationship between Emotional Intelligence and Academic Achievement

The research objective was to examine the relationship between emotional intelligence and academic achievement.

6.1.1 Hypothesis Testing

H₀₁: There was no significant relationship between emotional intelligence and academic achievement.

To test this null hypothesis, a bivariate correlation analysis was performed to find the Pearson product moment correlation coefficient. The findings were presented in Table 1.1.

Citation: Njeri, M. W; Mutua, J & Mugambi, D. (2024). Emotional Intelligence as a Correlate of Academic Achievement among Form Three Students in Machakos County, Kenya.. *Journal of Popular Education in Africa.* 8(2), 31 – 40.

Table 1.1: Correlation between Emotional Intelligence and Academic Achievement

		Academic Achievement
Emotional Intelligence	Pearson correlation	.332**
	Sig (2-tailed)	.000

Note. N=330

Source: Field Data 2023

Table 1.1 showed a significant positive relationship between emotional intelligence and academic achievement, $r(330) = .332, P < .01$. Therefore, the null hypothesis was rejected and the alternative hypothesis was adopted. The results suggest that increase in emotional intelligence led to slight increase in academic achievement scores and vice versa.

The researcher further analyzed the relationship between emotional intelligence domains and academic achievement. The output was presented in Table 1.2.

Table 1.2: Correlation between Emotional Intelligence Domains and Academic Achievement

	Pearson Correlation	Sig. (2tailed)
Self-Awareness	.298	.00
Self-motivation	.292	.00
Social skills	.262	.00
Empathy	.263	.00
Self-regulation	.245	.00

Note. N=330

Source: Field Data 2023

As observed in Table 1.2, there was a significant positive association between self-awareness ($r(330) = .298, p < .01$), self-motivation ($r(330) = .292, p < .01$), social skills ($r(330) = .262, p < .01$), empathy ($r(330) = .263, p < .01$), self-regulation ($r(330) = .245, p < .01$) and academic achievement. This implied that increase in any of the domains led to slight increase in academic achievement scores. The findings showed that those students who rated themselves high in the emotional intelligence subscales had high academic achievement scores.

6.2 Discussion of the Findings

This study found a positive significant association between emotional intelligence and academic achievement as seen in Table 1.1. The researcher also established the link between emotional intelligence subscales and academic achievements. A significant correlation emotional intelligence domains and academic achievement was found. The results were in support of emotional intelligence theory that states that emotional intelligence is associated with academic success. Students with high emotional intelligence are able to deal with negative emotions which may disrupt learning and eventually led to academic success (Mayer & Salovey, 1997).

The findings were also in line with some reviewed literature in chapter two that found positive correlation between emotional intelligence and academic achievement. The research findings were in line with Ayesha (2019) who found a positive association between emotional intelligence and academic achievement among students in Pakistan. The researcher revealed that the learners with high level of emotional intelligence had high academic scores.

Citation: Njeri, M. W; Mutua, J & Mugambi, D. (2024). Emotional Intelligence as a Correlate of Academic Achievement among Form Three Students in Machakos County, Kenya.. *Journal of Popular Education in Africa*. 8(2), 31 – 40.

In Nigeria, Ojewola (2020) found a notable link between emotional intelligence and academic achievement among secondary learners in Ogbomosho Metropolis. Majority of students who had high emotional intelligence had better academic scores compared to students who had low emotional intelligence level. The results were also similar to those of Jane (2020) who found a significant association between emotional intelligence and academic achievement among learners. The results shown that most students who had high emotional achievement also had high academic achievement.

Similarly, Jane et al. (2020) in their study on the link between emotional intelligence and academic achievement found out that the two variables were highly related. The researcher found a higher correlation between academic achievement and expression of emotions compared to other domains of emotional intelligence.

In conclusion, majority of the findings from different literature above found a positive association between emotional intelligence and academic achievement irrespective of culture, age or methodological differences. Therefore, enhancing emotional intelligence among students may improve their academic achievement.

6. Conclusions

A significant positive relationship between emotional intelligence and academic achievement was found. There was also a significant link between all emotional intelligence domains and academic achievement. This implies that students with high emotional intelligences score high grades in academics and those with low emotional intelligence score low marks in academics. Therefore, it is important to enhance emotional intelligence among students to improve their academic achievement.

7. Recommendations

Based on the research findings the following recommendations were made regarding policy and further research:

8.1 Policy Recommendations

The study investigated the link between emotional intelligence and metacognition. The findings revealed a significant correlation between emotional intelligence and academic achievement. Therefore, teachers and stakeholders in education should come up with training programs to enhance emotional intelligence. This may improve students' academic achievement.

8.2 Recommendations for Further Research

The following recommendations were given for further research:

- i. This research was conducted in Machakos County. It may be difficult to generalize the findings in all the counties because of regional differences. Therefore, further research is necessary in other counties to establish the predictive weight of emotional intelligence and metacognition on academic achievement.
- ii. This research was conducted using form three students in high schools. The results may not be generalized to other sample groups. Further research may be conducted using different samples like university students and primary school pupils.

Citation: Njeri, M. W; Mutua, J & Mugambi, D. (2024). Emotional Intelligence as a Correlate of Academic Achievement among Form Three Students in Machakos County, Kenya.. *Journal of Popular Education in Africa*. 8(2), 31 – 40.

- iii. This study used questionnaires to collect data on emotional intelligence as a correlate of academic achievement. Further research may be conducted on the same variables using different tools of data collection like, interview to find out if similar results will be revealed.

Citation: Njeri, M. W; Mutua, J & Mugambi, D. (2024). Emotional Intelligence as a Correlate of Academic Achievement among Form Three Students in Machakos County, Kenya.. *Journal of Popular Education in Africa*. 8(2), 31 – 40.

References

- Agnes, A.M., Jacinta, K., & Robert, A. (2021). Human resource management practices and academic performance of secondary schools in Machakos county,9(5). <https://doi.org/10.24940/theijbm/2021/v9/i5/BM2105-027>
- Ayesha, K. (2019). Emotional intelligence as a predictor of academic achievement of open and distance learning students. *ASEN Journal of Open and Distance Learning*, 11(2).
- Helen, C. A. W., Peter, K. B.& Joseph, O. (2020). Emotional intelligence and academic achievement among university upgrading teacher students. *African Journal of Education and Practice*,6(4).
- Jane, M. W. (2020). *Emotional intelligence and academic self- efficacy beliefs as predictors of academic achievement among form four students in Kiambu county Kenya*. (Unpublished master's dissertation). Kenyatta University, Nairobi, Kenya.
- Jane, W.K., Dr. Jacinta.A.K., &Dr. Alice, A. (2020). Emotional intelligence and academic achievement among secondary school students in Kilifi County. Kenya. *Journal of Research Innovation and Implication in Education*,4(2):32-42.
- Kalia, P. & Saini, S. (2020). Studying the relationship between emotional intelligence and its components with metacognitive skillfulness in college students. *International Journal of Current Microbiology and Applied Sciences*, 5(8). DOI: <https://doi.org/10.20546/ijcmas.2020.908.227>
- Liang, X, L. & Liu, P. P. (2020). The influence of cognitive ability on academic performance of junior middle school students: a mediated moderation model. *Psychol. Dev. Educ.* 36, 449-461: <http://www.devpsy.com.cn/EN/10.16187/j.cnki.issn1001-4918.2020.04.08>
- Lyakurwa, S. (2018). Students' intelligence and causal attributions for academic underachievement among secondary students in Tanzania. *Journal of Contemporary Research*, 9(2).
- Madhavan, M. Kitratporn, Poonsook. (2016). Relationship between emotional intelligence and academic achievement of business students. <http://dx.doi.org/10.2139/ssrn.2779015>
- Masila, J.N. &Irerri, A. (2022). Relationship between Academic Engagement and Academic Achievement among High School students in Machakos County, Kenya. *Journal of Popular Education in Africa*. 6(6), 129-138.
- Mayer, J.D., & Salovey (1997). What is Emotional Intelligence? Emotional development and emotional intelligence: *Educational Implication*, 3-61, New York
- Ministry of education, science and Technology National Education Sector plan (2013-2018), (2018-2022)
- Modupeola, A., Olawoyin., &Eraigbai, J.I. (2019). Students' academic achievement as influenced by teaches' quality: evidence from Southwest, Nigeria. *Education Journal*, 6(7).
- Muiya, P. (2017). *An investigation into the family-based factors influencing students' academic performance in public secondary schools in Machakos sub county, Machakos County*. (Unpublished master's dissertation). Machakos University, Kenya.
- Naila, N., Muhammad, K., & Ashiq, H.D. (2017). Determinants of students' academic achievement at secondary school level. *Bulletin of Education and Research*, 39(1), 145-158.

Citation: Njeri, M. W; Mutua, J & Mugambi, D. (2024). Emotional Intelligence as a Correlate of Academic Achievement among Form Three Students in Machakos County, Kenya.. *Journal of Popular Education in Africa*. 8(2), 31 – 40.

- Ngumuta, M. (2022). *Implications of school culture on academic performance in selected public secondary schools in Machakos County, Kenya*. (Unpublished master's dissertation). Kenyatta University, Kenya.
- Njuguna, M. N. (2022). *Antecedents of academic procrastination and its relationship to academic achievement among form three students in Kiambu County, Kenya*. (Unpublished masters' dissertation). Kenyatta University, Nairobi
- Norehan, Z. (2016). *Metacognition and its relationship with students' academic performance*. *Universiti Teknologi*. Malaysia Institutional Repository.
- Ojewola, F. (2022). Relationship between emotional intelligence and academic achievement of secondary school students in Ogbomoso Metropolis, Nigeria. *13*(21).
- Owan, F. (2022). Emotional intelligence and students' academic achievement in Chemistry in senior secondary schools. [Doi.org/10.2139/ssrn.4066519](https://doi.org/10.2139/ssrn.4066519).
- Pishghadam, R., Faribi, A. M., Shadloo, F., Gholami, M. J. and Shayesteh, S. (2022). Intelligence, emotional intelligence and emo-sensory intelligence: which one is a better predictor of university students' academic success? *Front. Psychol* *13*. DOI: [10.3389/fpsyg.2022.995988](https://doi.org/10.3389/fpsyg.2022.995988)
- Quaiser, S., Hussain, I., Syed M.A., Parveen, R., & Lodhi I.S. (2019) Association between emotional intelligence and academic success among undergraduate: A cross sectional study in KUST, Pakistan, *4*(7).
- Tadese, M., Yeshaneh, A., & Mulu, G.B. (2022). Determinants of good academic performance among university students in Ethiopia: Across-sectional study. *MedEduc22*, 395. DOI: [10.1186/s12909-022-03461-0](https://doi.org/10.1186/s12909-022-03461-0)
- The Kenya National Examinations Council, (KNEC). (2017, 2018, 2019, 2020). The 2018, 2019, 2020, 2021 Kenya Certificate of Secondary Education (KCSE) examination essential statistics.