



Relationship between Emotional Intelligence and Academic Performance among Secondary School Students in Athi-River Sub County, Kenya

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Abstract

Emotions play a critical role in human behavior, they steer human beings, satisfy daily needs and orient human abilities and decision-making process. Emotional intelligence is therefore, very important as it equips individuals with skills necessary to negotiate through life successfully. Numerous studies in Kenya have delved into demographic characteristics affecting academic performance among secondary school students. However, there is paucity of literature on the role of emotional intelligence on academic performance. The purpose of the present study was to examine the relationship between emotional intelligence and academic performance among adolescents in secondary schools within 13-18 years. Purposive, simple and systematic sampling were used to select four secondary schools and 120 participants. A quantitative research approach was used. BarOn Emotional Quotient Inventory-Youth version (BarOn EQ-i: YV) was used to measure emotional intelligence. Correlation analysis was used and results indicated a positive correlation between emotional intelligence and academic performance. There was a significant correlation between adaptability skills and academic performance. Collectively, these results infer that better academic performance might be realized by targeting skills relating to adaptability, which is a dimension of emotional intelligence. As such, the ministry of education should mainstream emotional intelligence training programs in secondary school curriculum.

Keywords: *Emotional Intelligence, academic performance and adaptability skill*

1. Introduction

There has been an increased interest in emotional intelligence (EI) concept among adolescents in the recent past. As a result, numerous empirical studies have been done among adolescents on the importance of emotional intelligence on variables such as



academic achievement (Bar-On, 2003; Ferrando, et al., 2010), Consumption of toxic substances (Limomero, Toma's-Sa'bado, & Ferna'ndez-Castro, 2006), academic and social adaptation (Serano & Andreu, 2016) and self-concept (Coelho, Marchante, & Sousa, 2016).

The ability to handle emotions facilitates recognition of emotions in others and ourselves, creates awareness of how emotions drive our behavior, and effective methods of managing our emotions in different situations (Saini, 2016). In addition, individual's capacity to cope with own emotions, to adjust them to a given situation, understand other people and relate with them positively, brings a sense of satisfaction and accomplishment both at the individual and societal level (Petrovici & Dobrescu, 2014).

In academic research, varied terminologies have been used in reference to emotional intelligence. These terminologies include emotional literacy (Averill & Nunley, 1992), emotional competence (Goleman, Emotional intelligence, 1995) and empathic accuracy (Saarami, 2001). There are varied definitions of emotional intelligence in the educational literature. According to Goleman (1998), emotional intelligence refers to individual's ability to observe her/his reactions as well as other people reactions and distinguish them, then use them as a guide for thinking and behaving. On the other hand, Bar-On (2000) defines emotional intelligence as a set of personal, emotional and social capabilities that enable an individual to cope with the pressures of life effectively. Moreover, Petrides and Frederickson (2004) define it as "a constellation of emotional-related self-perceptions and dispositions located at lower levels of personality hierarchies" (p. 2.)

Different scholars have defined the concept of emotional intelligence using different theoretical models. Three models that have gained popularity among the researchers include Bar-On model, Mayer and Salovey's model, and Goleman's model. These models define emotional intelligence from two main perspectives: Firstly, Emotional intelligence is viewed as a mental ability hence perceived to be a form of intelligence. Mayer and Salovey's model hold this perspective. Secondly, Emotional intelligence is viewed as a mixture of personality traits and mental abilities. Bar-On model and Goleman's model are examples of this perspective (Bar-On & Parker, 2000). Bar-On model represents emotional intelligence in five distinct skills. First, intrapersonal skills, which includes self-awareness, assertiveness, and self- regard. Secondly, interpersonal skill including empathy, understanding of feelings, social responsibility, and capacity to create and maintain fulfilling relationships. Third, Stress management: this refers to individual's ability to cope with stress, deal with stress in a positive way, and delay emotional eruptions in stressful situations. Fourth, Adaptability, which includes being flexible, realization of reality and problem solving. Lastly, general mood, which include optimism and happiness.



Academic performance is the outcome of education: it is a measure of the extent to which a student or an institution attains their educational goals. Academic performance is evaluated through tests that are related to course work and other types of examinations (Kyoshiba, 2009). According to Lopes, et al. (2004), academic adjustment in school and social life among adolescents is largely determined by their ability to utilize their emotions effectively.

Emotional regulation is the critical component of EI that supports students in the learning process. Effective skills in emotional regulation enable individuals to manage their stress levels effectively. Moreover, a child with skills in emotional regulation will effectively manage the motivation and energy in anger in more positive ways of asserting herself/himself instead of yelling and hitting others (Lzard, Stark, Trentacosta, & Schultz, 2008). Parker, Summerfeldt, Hogan, and Majeski (2004) opined that students with the capacity to control their emotions are less likely to be affected by negative emotions emanating from the learning environments and examinations. Depending on their level of emotional control, these students may be able to develop positive emotions that are critical to academic performance. Salovey and Sluyter (1997) in their study observed that academic life and growth in intellectual abilities calls for adequate ability to manage emotions in the thinking process, to nurture intrinsic motivation, to manage impulsive behavior, to boost concentration, and to function effectively under stress.

Findings of a study conducted by Perera and DiGiacomo (2013) showed that individuals with high emotional intelligence had the capacity to regulate their emotions. Hence, they were less vulnerable to negative influence of negative emotions in learning and cognitive function in evaluation settings. Students with high emotional intelligence are perceived to be friendly and non-antagonistic by their peers and friends (Brackett, Rivers, & Salovey, 2011). Consequently, this boosts their interpersonal relationships with peers hence improvement in their intellectual development that results to high academic performance (Ford & Smith, 2007).

A study conducted by Fayombo (2012) revealed that emotional intelligence and gender were both predictors of academic achievement even though the former was a better predictor of academic achievement. Farah and Sultan (2013) also found a positive relationship between emotional intelligence and academic achievement. Apart from establishing a positive relationship between emotional intelligence and academic achievement, Fayombo (2012) associated 48% variance in academic achievement to students' level of emotional intelligence. Parker et al. (2004) examined the relationship between academic achievement and emotional intelligence of 667 high school students. Results indicated that students with middle and top academic achievements had higher levels of interpersonal, stress management and adaptability skills in comparison with students in the problematic group. However, Spence (2003) argued that an individual might possess both interpersonal and intrapersonal skills and still fail at demonstrating



these skills in adapting to varied social environments. On the other hand - Brackett et al. (2011) noted that students with high emotional intelligence were less likely to experience attention and learning problems, to develop negative attitude towards their teachers and the school. Which demonstrated that a part from improved academic performance, emotional intelligence influences, there are other dimensions of students' performance.

Findings of a study conducted by MacCann, Fogarty, Zeidner, and Roberts (2011) showed that better educational outcomes could be realized by focusing on skills relating to problem- focused coping and emotional management. Moreover, Holt (2007) recommended the incorporation of emotional intelligence training program into secondary schools education curricula, since there was a significant relationship between academic achievement and emotional intelligence. In Nigeria, a study by Nwadinigwe and Azuka-Obieke (2012) on the impact of emotional intelligence on academic performance among senior secondary school students showed a significant relationship between emotional skills and academic achievement. In the same vein, a study in India examining the relationship between emotional intelligence and academic achievement among 321 high school students, revealed a significant positive correlation between emotional intelligence and academic performance (Chamundeswari, 2013).

The aforementioned studies were mostly done in western countries. Studies done in Kenya in respect to students' academic performance have mostly explored demographic factors affecting academic performance. As such, there is paucity of literature on the relationship between emotional intelligence and academic performance among secondary school students in Kenya. Therefore, this study aimed at establishing the relationship between emotional intelligence and academic performance among secondary school students in Athi-River Sub County, Kenya.

2. Methodology

The sample consisted of 60 girls and 60 boys (N=120) in the age group of 13-18 years, studying in private secondary schools in Athi-River sub-county. The sample comprised of students who had completed an academic term in their respective school. The mean age of students was 15.93 (SD=1.168). The study was quantitative and targeted four schools in Athi-River sub-County. This approach was the most appropriate since the study had many participants. In addition, data from the participants was used to examine the relationship between EI and academic performance.

A validated version of BarOn Emotional Quotient Inventory: Youth Version (BarOn EQ-i: YV) was used to measure emotional intelligence. This instrument consists of 60 items (long version) that are self-administered. BarOn and Parker developed this tool, it is used to assess the social, and emotional functioning of youths aged 7 to 18 (Bar-On & Parker, 2000). In this tool, participants rate their responses on a four likert-scale that ranges from 1 for "not true of me" to 4 "very much true of me". A separate questionnaire was



used to assess the socio-demographic characteristics. Previous school performance examination results grades were used as a measure of academic performance. Data was analyzed using Statistical Package for Social Science (SPSS) version 21. Data collected was coded, fed into SPSS and analyzed using Pearson Correlation Coefficient.

3.Results

In this study, data on participants emotional intelligence and academic performance were sought. Pearson product-moment correlation coefficient was used to examine the relationship between emotional intelligence and academic performance.

3.1 Key Socio-demographic Characteristics of the Respondents

Key demographic characteristics such as age, gender, class and religious affiliation were sought. The results indicated that 35.0% of the participants fell between 13-15-years and 16-18 years-olds were 65.0%. In terms of gender, 50% were males and 50% were females. Distribution according to religion indicated that 40.0% of the students were Catholics. Protestants and Pentecostals were 36.7% and 11.7% respectively. Students from Islam, SDA backgrounds formed the smallest groups of 4.2% and 1.7% respectively.

3.2 Relationship between Emotional Intelligence and Academic Performance

The study examined the relationship between emotional intelligence and academic performance as measured by grade category (Table 2). Results show a positive non-significant correlation ($r(120) = 0.124$, $p = 0.179$) between emotional intelligence and academic performance. This is indicative of a trend on both variables.

Table 1

Pearson's Correlation Test showing relationship between academic performance and emotional intelligence

	Academic performance	Emotional intelligence
Academic performance	1	0.124
Emotional intelligence	0.124	1

3.2.1 Mean Scores on Academic Performance and Emotional Intelligence

Table 2 shows the mean scores on academic performance and emotional intelligence (EI) among the participants.



Table 2
Mean Scores on Academic Performance and EI

	Mean	SD
Academic performance	57.33	16.006
Emotional intelligence	91.37	10.938

The results indicated that the mean score for academic performance was 57.33 (SD = ± 16.006) and that for emotional intelligence was 91.37 (SD = ± 10.938).

3.3 Relationship between Academic Performance and different Dimensions of Emotional Intelligence

The study examined the relationship between academic performance and different dimensions of emotional intelligence among secondary school students in Athi-River Sub County.

Table 3
Pearson Coefficient between Academic Performance and Different Dimensions of Emotional Intelligence

	Intrapersonal competence	Interpersonal competence	Stress management	Adaptability	General mood	Positive impression	Grade category
Pearson coefficient	-0.066	0.042	0.009	0.246*	-0.082	-0.007	0.124
Level of significance	0.471	0.650	0.925	<0.01	0.371	0.941	0.179
Number	120	120	120	120	120	120	120

Table 3 presents Pearson coefficient between academic performance and different dimensions of emotional intelligence. The value of Pearson coefficient indicates a statistically significant correlation ($p < 0.01$) between adaptability and academic performance. This implies that the higher the adaptability skill among students the higher will be their academic performance.

4. Discussion

The results of this study indicated a statistically significant positive correlation between adaptability skills and academic performance ($p < 0.01$) among secondary school students.



This result is similar to outcomes of a study conducted by Al-Rfous (2012) who found a significant correlation between adaptability and academic achievement ($p = 0.03$). In addition, study findings showed a positive though non-significant correlation between emotional intelligence (EI) and academic performance. This result affirms the results of Bastian, Burns, and Nettelbeck (2005) which showed positive non-significant relationship between EI and academic achievement among first year tertiary students. The positive correlation implies that emotional intelligence could predict academic performance of secondary students.

Based on this study, adaptability is a significant predictor of academic performance. This is also supported in a study by Martin et al. (2013), in which adaptability significantly predicted academic (class participation, positive academic intentions, and school enjoyment - positively) and non-academic (life satisfaction, self-esteem, purpose and meaning- positively) outcomes far beyond effects of socio-demographic factors. Moreover, adaptable students were more likely to be buoyant and self-regulate when faced with daily academic challenges. Therefore, the ability to adapt will not only influence students' achievement in school but also in the world beyond.

5. Conclusion

Empirical studies have confirmed positive correlation between emotional intelligence and academic performance. Adaptability skill a dimension of emotional intelligence posted a significant correlation with academic performance. These results infer that better academic performance could be realized by targeting skills relating to adaptability among students. Enhancement of adaptability skill will ultimately improve emotional intelligence among secondary school students. Based on these findings, the study recommends that the ministry of education should mainstream emotional intelligence programs in secondary school curriculum. Moreover, it should have teacher-training programs that focus on enhancing emotional intelligence in order to ensure that qualified teachers can facilitate emotional intelligence programs in schools. Therefore, there is need for all stakeholders in the educational sector to embrace the important role of EI in secondary students' academic and non-academic life.

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