

# ***THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES***

## **The Relationship between Students' Perception of the Classroom-Learning Environment and Self-Concept in Secondary Schools in Taita-Taveta County, Kenya**

**Simon Walwe Juma**

Ph.D. Student, Department of Education Management and Policy Studies  
Masinde Muliro University of Science and Technology, Kenya

### **Abstract:**

*The purpose of this study was to determine the relationship between students' perception of the classroom learning environment and self-concept in secondary schools in Taita-Taveta County. The study employed a correlation research design with a target population of 2311 student in the 40 public secondary schools in Taita-Taveta County. A random sample of 260 students was involved. Two questionnaires were used for data collection and were validated through expert judgment whereas the reliability of the instruments was established through Cronbach's Alpha coefficient, where coefficients of  $\alpha$  0.913 and  $\alpha$  0.965 were obtained. Data was analysed using percentages, means and Pearson's correlation co-efficiency( $r$ ) at  $p = 0.05$ . Correlation analysis revealed that there was a statistically significant relationship between students' perceptions on the classroom learning environment and self-concept. The finding implied that providing a quality classroom learning environment may improve the learners' academic performance and consequently their stay in schools.*

**Keywords:** Classroom, learning environment, self-concept, perception

### **1. Introduction**

The lives of learners are arguably and primarily embedded in educational environments. However, although the school may set the tone for shaping the attitudes of students and for placing emphasis on the affective domain, the classroom environment within the school has a major influence in the development of students' behaviour related to learning. A learning environment setting that adversely affects student comfort can result to low student achievement, indiscipline, anxiety and negative attitudes while the converse is true (GoK, 2001). The term has been defined differently by different scholars. Among others, the learning environment has been defined as the diverse physical locations, contexts and cultures in which students learn (Hannah, 2013). According to Bakhshialiabad, Bakhshi and Hassanshahi (2015), the term may in addition encompass the culture of a school or class and its presiding ethos. It may include how students interact with and treat one another and the ways in which teachers may organize the setting to facilitate learning. Wright (2011) defined learning environment as any factors or practices a learner interacts with within the school. In the current study, the classroom learning environment meant aspects such as aesthetic, thermal condition, cleanliness, acoustics and lighting which provide the physical conditions which facilitate the teaching-learning process.

Many writers agree that children's attitudes and behaviours are organized primarily within the classroom (Hannah, 2013; Bergen, 2014). Emphasizing the importance of the classroom, Ireson and Hallam (2009) noted that the classroom does not only provide a physical setting for the teaching-learning process, but also contribute to children's happiness, creativity and independence as well as the feeling of worthiness. In this respect, Hannah (2013) observed that children's emotional, physical, social, cognitive and spiritual wellbeing are supported by functional classroom environments. The classroom thus complements the educational needs of the school by supporting children to have a strong sense of belonging, facilitate their growth and the learning opportunities available to them. Tuz-Zahra, Arif and Yousuf (2010) concurred but added that students surrounded by a safe, modern and a controlled environment experienced a positive effect in their learning. Apart from personal threats, insecurity for children can emanate from adverse learning environment. Poorly constructed classrooms and playing grounds, insufficient and broken-down toilets, gender insensitive location of toilet and bathrooms, inadequate and inappropriate furniture can be a threat to children safety and wellbeing at school (GoK, 2008). Although many researchers agree (Bergen, 2014; Adeogun & Olisaemeka, 2011; Nyamosi, 2013; Jagero, 2011; Usaini & Bakar, 2015) that the school

environment influence student learning, it is not clear what aspects of the cognitive and affective learning is affected by such environments.

Self-concept is one of the important affective aspects that affect student learning in different ways. Aghamolaei and Fazel (2010) defined self-concept as a system of attitudes, feelings and perceptions that the individual has about him or herself. It is the centre of their thinking-feeling world, and that all actions spring from individual's perception of the self and the world. McConnell (2011) defined self-concept as a personal judgment of worthiness that is expressed in the attitudes people hold towards themselves. The author observed that self-concept may be multifaceted with regard to varying experiences, and is significantly associated with personal satisfaction and affective functioning. According to Yara (2010) self-concept refers to people's perceptions and feelings toward themselves and plays a central role in relation to mental health and to the achievement of psychological maturity. In the current study, self-concept was defined as the way students believed, acted, valued and evaluated themselves in relation to classroom learning environment.

Many researchers agree that self-concept is, perhaps, the basis for all motivated behavior including learning (Wright, 2011; Yara, 2010; Tuz-Zahra, Arif & Yousuf, 2010). Self-concept gives rise to the possible self and it is the possible self that create the motivation for behavior. According to Wright (2011), self-concept is central to emotional wellbeing as well as academic success among students. Rogers (1951) in Client-Centred Therapy study observed that people's self-concept influences how they perceive themselves and their resultant behaviour. He noted that people whose positive self-concept leads them to believe that they will succeed are likely to behave in ways that ultimately lead to success while those who expect failure are much more likely to bring it about through their actions. That is why the self-concept of mentally healthy people is always consistent with their thoughts, experiences and behaviour. Besides, positive self-concept has been found to relate to a number of behaviours including; satisfaction with life, low anxiety, low aggression, academic achievement and motivation in performing certain skills among learners (Wright, 2011).

Studies by Ireson and Hallam (2009), Liu and Wang (2008), Moller, Streblow and Pohlmann (2009) on self-concept noted that whether people focus on social roles and relationships or individual traits and characteristics in describing themselves depends significantly on their self-concept and immediate milieu. Studies by Yara (2010), Wright (2011) and Tuz-Zahra, Arif and Yousuf (2010) that examined the relationship between self-concept and academic achievement have supported the conclusion that self-concept is a strong facilitator of academic achievement. A positive or negative change in self-concept tends to produce a commensurate change in academic achievement. According to Kikechi (2003) and a government report (GoK, 2005) there has been low transition from primary to a secondary level in Taita Taveta County due to school learning environment. Learning like all motivated behaviours calls for both cognitive and affective domains of the learner. Thus, being such an important place in the students' growth and life at school, it is important to understand ways in which the classroom-learning environment affects learners' self-concept in Kenyan schools.

## 2. Statement of the Problem

The push for increased student performance in schools has seen researchers focus on pedagogical and curriculum reforms with little regard on the classroom-learning environment and their self-concept. Yet student satisfaction as mediated by their environment is related to variables related to student engagement in the classroom such as attitudes, knowledge, skills and self-concept. In Taita-Taveta County, there has been generally a low transition from primary school to secondary schools. Further, among those who have transited, few have been able to complete the cycle. Among the reasons for such state of affairs is that there has been lack and sustained interest among the learners due to unattractive school environments. Despite the fact that several and significant variables have been studied and their impact on teaching-learning process determined, few have investigated the relationship between learners' perception of the classroom-learning environment and self-concept in Kenyan schools. The current study sought to determine the relationship between students' perceptions of the classroom-learning environment and self-concept in secondary schools in Taita-Taveta County.

### 2.1. Purpose of the Study

The purpose of this study was to determine the relationship between students' perception of the state of the classroom-learning environment and their self-concept in secondary schools in Taita-Taveta County.

### 2.2. Objectives of the Study

The study was guided by two objectives:

- To establish students' perception of the state of classroom-learning environment in secondary schools in Taita-Taveta County.
- To determine the student's perception their self-concept in secondary schools in Taita-Taveta County.

### 2.3. Hypotheses of the Study

The following one hypothesis guided the study:

- Ho1: There was no statistically significant correlation between students' perception of the state of classroom-learning environment and their self-concept in secondary schools in Taita-Taveta County.

#### 2.4. Theoretical Framework

The theoretical framework for this study was based on the Social Cognitive theory of Behaviour by Bandura (2002). However, given that the teaching-learning process is a multifaceted, an eclectic approach was adopted to include the Ecological theory by Bronfenbrenner (2000) and the Science of Adolescent Development by Vygotsky (1962). The social cognitive theory of Bandura explains behaviour in terms of continuous interaction between the person's cognitive aspects and objects in the environment. Bandura noted that these features interact in a reciprocal manner. In his view, the environment can determine a person's behaviour (self-concept) and the person can also change the environment. Similarly, the person's cognitive factors can influence a person's behaviour and vice versa.

Cognition is the way a person perceives objects in the environment and processes them into meaning (Sanrock, 2005). Cognitive theorists (Piaget 1896 –1980 & Zygotes 1896-1934) maintained that behaviour is initiated by stimuli, which are physical objects within the environment. According to Sanrock (2005), cognition has several aspects. It depends on the characteristics of the stimuli and individuals' past experience and serves to give meaning to new cognition. Secondly, it generates emotions, form attitudes and provide motivation for behavioural consequences. According to ecological theory, self-concept is a function of what others say about someone, the environment and all aspects that provides, mediate and perpetuate social experiences. In Vygotsky's theory, the cognitive development in learners can be encouraged through the provision of stimulating environments and attention paid to the factors for cognitive growth. Learners are in continuous interaction with the physical as well as the social environment that may be constantly shaping their behaviour, attitudes as well as their self-concept. Different school physical facilities provide learners with different environmental settings that could be viewed differently depending on their experiences and what others say about such facilities. These differences could influence students' self-concept and in turn impact on their academic achievement in the school. Thus, approaches that take into account adolescents' self-confidence, expectations for achievement and a sense of purpose are likely to be as effective as approaches taken to shaping learners' self-concept.

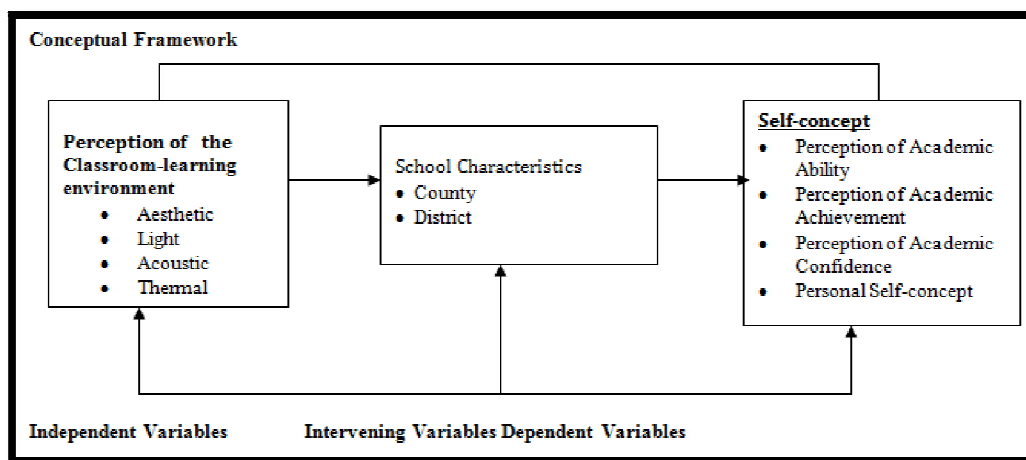


Figure 1: The Perceptual Process, Adapted From Nzuve (1999)

In figure 1, the perception of the state of classroom environment is the perceptual inputs in the perceptual process acted upon through the perceptual mechanism of thinking, understanding, and knowing. This is affected by the perceiver's and object's characteristics. Once what is perceived is cognized, attitudes, opinions and feelings will emerge that will result into behavioural consequences (the self-concept) that will influence the way the perceptual inputs will be perceived in future.

### 3. Materials and Methods

Correlational research involves collecting data to determine whether, and to what degree a relationship exists between two or more quantifiable variables (Gay, Mills & Airasian, 2006; Mugenda & Mugenda, 1999 and Kathuri & Pals, 1993). The purpose of a correlation research is to determine relationships between variables and use such relationships if any to make predictions. Given that the study sort to establish the relationship between students' perception classroom-learning environment and their self-concept, correlation research design was deemed appropriate.

#### 3.1. The Location of the Study

The study was carried out in Taita-Taveta County in Kenya. Taita-Taveta County is in Coast Region. The County has Four Districts including Mwatate, Taita, Voi and Taveta. They border the Counties of Tana River, Kitui and Makueni in the North, Kwale and Kilifi to the East, Kajiado to the North West and Republic of Tanzania to the South and South West. According to the Taita-Taveta County Development Plan (1997-2001), the County cover an area of approximately 16,975 Sq Km including 16 Sq Km representing Lake Jipe and Lake Chala. Sixty-two percent of the County is occupied by Tsavo National Park. Kerlinger (1973) noted that a researcher should be familiar with the research locale as such the choice of the County.

### 3.2. The Target Population

The study targeted students from public secondary schools in Taita-Taveta County. The students were selected from both single sex and co-educational institutions. The rationale for considering students from public secondary schools was that they were exposed to the same curriculum, syllabus and teachers with similar professional qualifications, and developed using similar source of resources. The accessible population comprised 2311 Form Three students in 40 public secondary schools in Taita-Taveta County. Form three students were considered for the study on the assumption that they had spent the longest time in schools than either Form One or Two, and know their schools better. It was assumed that they had the ability to adequately respond to the questionnaires administered. Form Four students were excluded because of examination concerns and potential exit anxieties. The students were categorized into 1188 and 1123 from the 14 Provincial and 26 District secondary schools respectively. This was due to the perceived difference in terms of facility development that may not offer similar environments hence different perception. Table 1 summarizes this information on the accessible population.

School Category	Number of Schools	Number of Students
Provincial	14	1188
District	26	1123
Totals	40	2311

Table 1: Target and Accessible Population  
Source: Taita-Taveta County Education Office (2010)

### 3.3. Sampling Procedures and Sample Size

Stratified and systematic sampling methods were employed to get the sample size for the study. Students were first stratified into two categories, Provincial and District secondary schools. Stratifying of schools was based on the assumption that Provincial schools had adequate and quality facilities compared to District schools. District schools were mostly developed through parent and community initiative. Due to the regional disparity in resource endowment, such initiatives did not raise enough funds for facility development. The entire sample for the study was determined at 10 percent of the accessible population. According to Gay, Mills and Airasian (2006) in correlation studies, 30 cases or more are required. A sample of 255 respondents was selected from both Provincial and District secondary schools proportionally. This was slightly higher than the 10 percent proposed (232). It was to cater for non-response rate and maintain an almost same sample to avoid discarding many cases due to missing scores. Using school registers as a sampling frame, a systematic sampling method with a random start was applied to obtain the respondents from each school. The total number of students in the register was divided by the required sample from the school to obtain the sampling interval (k). A table of random numbers was then used to determine the first number (r). Starting from this randomly chosen number (r), every k<sup>th</sup> student in the school register was selected for inclusion in the sample until the required number was obtained per school. This was done for all sampled schools until the required sample was obtained. Table 2 summarizes this information.

School Category	Total No. of Students	Sample	Percentage
Provincial Schools	1188	139	54.5
District Schools	1123	116	45.5
Total	2311	255	100

Table 2: Sample Size by School Category

As indicated on Table 2, 139 (54.5 %) respondents were sampled from Provincial schools while 116 (45.5%) respondents were sampled from District schools.

### 3.4. Data Analysis Procedure

After data collection, the questionnaires were thoroughly examined. They were then organized into frequency tables to suit the various statistics that were applied. They were then keyed into a computer for further analysis, where a computer programme, the Statistical Package for Social Sciences (SPSS) was used. Students' responses on the Student Facility Perception Questionnaire (SFPO) and Student Self-Concept Scale (SSS) were summed up based on the five-point Likert scale from strongly disagree to strongly agree and means computed to form students' perception and self-concept scores respectively.

## 4. Results and Discussions

### 4.1. Students' Perception on the Classroom- Learning Environment

The first objective of the study was to determine students' perceptions on the classroom-learning environment as measured by the attributes of the environment such as light, aesthetics, acoustics and the thermal conditions as well as cleanliness. Respondents were asked to indicate their agreement or disagreements on a five-point Likert scale their reactions

to the statements. The scores ranged from strongly disagree (1), disagree (2), undecided (3), agree (4) and (5) strongly agree. Table 3 indicates students' perceptions on the classroom- learning environment.

Statements	% rate	SA %	A %	UN %	D %	SD%
Classrooms are regularly cleaned to provide a dirt-free environment	97.7	38.3	44.0	2.0	7.00	6.40
The classrooms are well light at all times	92.6	35.1	29.4	3.5	11.0	13.6
The classrooms are well ventilated	93.1	28.9	44.0	1.2	10.0	8.80
Temperature in the classrooms is comfortable throughout the day	100	13.1	31.6	0.0	40.0	15.3
Furniture in the classrooms are comfortable	98.8	18.8	46.0	1.0	24.2	6.30
Broken windows in classrooms are replaced promptly	99.5	3.60	14.3	1.1	33.1	45.4
Classrooms have adequate space for movement and interaction	100	18.0	49.8	0.0	19.6	11.4
The laboratories are well light	99.9	35.4	43.4	2.2	11.8	6.80
The laboratories provide a dirt-free environment	98.8	22.2	52.4	4.2	10.9	9.10
The temperature in the laboratories is comfortable at all times	89.7	12.1	11.3	1.6	50.4	14.3
The laboratories have adequate space for students' movement	99.7	23.4	43.7	0.9	19.4	13.1
The laboratories have adequate furniture	97.0	18.3	33.7	0.6	29.3	15.4
The library is regularly cleaned to provide a dirt-free environment	85.2	33.3	30.3	7.2	11.2	3.20
The library is well light and ventilated at all times	82.1	8.20	11.1	5.5	50.2	7.10
The temperature in the library is comfortable at all times	86.2	3.00	20.0	1.1	60.0	2.10
The library has adequate reading space for all students	90.8	8.20	11.1	9.3	38.9	38.0
The library has relevant reading material	83.2	11.2	18.9	2.5	29.1	33.5

*Table 3: Students' Perceptions of the Classroom-Learning Environment*

Results on Table 3 indicate that a large percent of the respondents indicated that their classrooms (82.2%), laboratories (74.6%) and libraries (63.6%) were regularly cleaned to provide a dirt-free learning environment. A significant percentage, 72.9 % of the respondents felt that their classrooms were well ventilated while over 50% agreed that the classroom furniture were comfortable for students. In addition, over 70 % of the respondents felt that the laboratories were well lit and as such conducive for the teaching-learning process.

However, a large percentage of the respondents, 65.3%, 64.7% and 62.1% for the classroom, laboratories and libraries respectively felt that the temperatures in these facilities were unfavourable for learning while 78.5% reported that classroom windows were not promptly repaired. In addition, over 50 percent also indicated that the school libraries were not well ventilated. Further, 76.9% of the student indicated that the libraries lacked adequate reading space while 62.6% noted that their libraries had irrelevant reading material.

From the results, it can be noted that students are aware of the impact of the classroom learning environment to the teaching-learning process. They were able to perceive aspects within the classrooms that were conducive and those that were not. The students' perception that some aspects of the classroom learning environment were of good quality may be attributed to the various deliberate government interventions and initiatives meant to improve the quality of secondary education in the country. These include, the provision of science equipment or laboratories and grants to secondary schools in Arid and Semi-Arid areas, in which schools in Taita-Taveta County fall (Teachers' Service Commission, 2007). Further, the government with the assistance from the development partners especially the Oil Producing and Exporting Countries (OPEC) is also implementing the GoK/OPEC funded project, targeting 70 secondary and 350 primary schools in which each benefiting school receives Kshs. 2.1 million to cater for the construction and equipping of science laboratories and classrooms.

However, while some attributes of the classroom learning environment were conducive to the teaching-learning process, some were a hindrance to the process, especially as regards the school library and the thermal condition of the facilities studied. These findings are consistent with a report by UNESCO (2005) on Free Primary Education in Kenya which reported that many schools, including secondary schools in the country had poor quality facilities. Many, the report noted, were unhygienic, poorly maintained and unappealing to learners. They were thus incapable of attracting and maintaining the required enrolment rates in the schools. Highlighting the importance of the environment in learning, a review of the international school effectiveness literature by Stoll and Fink (1996) reported that although approaches to education vary from one country to another, successful schools have among other factors, learning environments that are orderly, safe and attractive and where attention is paid to the students' comfort. According to Smith, Nesbrakken, Wirak and Sonn, (2007), these needs are the most potent for learners. Arguing in line with Maslow's hierarchy of needs, the authors maintained that when these needs are deprived for a long period, all other needs recede in the background. The feeling of achievement, competence and meeting high standards of excellence in performance are not the concerns of those learners who have not met their physiological needs such as shelter, safety and self-esteem (Afework & Asfaw, 2014). Prior to attaining a level of pridelful involvement in one's activity; a person seeks the respect and assurance of others that he or she is a worthwhile person.

Santrock (2005) noted that the negative psychological changes associated with student development result from a mismatch between their needs and the opportunities afforded them by the schools. Schools in Taita-Taveta County could be stifling learners' access to quality education. The state of school libraries is worrying as has been highlighted by the current study. The libraries were poorly ventilated, overcrowded and lacked relevant reading material. As once observed by Harold Howay, former US Commissioner of Education; what the school thinks about its library is a measure of what it thinks about education. The library is the centre of academic life of students at school. Although some effort may have been made, school libraries have been neglected so much that learners' academic excellence has been compromised.

#### 4.2. Students Perception of Their Self-Concept

The second objective of the study was to determine students' perceptions on their self-concept as premeditated by their classroom-learning environment in four domains, Perception of Academic Ability (PAA), Perception of Achievement (PA), Perception of Academic Self-Confidence (PASC) and Personal Self-Concept (PSC). Respondents were asked to indicate their agreement or disagreements on a five-point Likert scale their reactions to the statements. The scores ranged from strongly disagree (1), disagree (2), undecided (3), agree (4) and (5) strongly agree. Table 4 indicates a mean summary of students' self-concept in the four domains.

Self-concept Domains	Mean	Std. Deviation
Mean Perception of Academic Ability (PAA)	3.631	.829
Mean Perception of Achievement (PA)	3.022	.966
Mean Perception of Academic Self-Confidence (PASC)	3.694	.964
Mean of Personal Self-Concept (PSC)	3.635	1.102
Overall Mean of Self-Concept	3.489	.842

Table 4: The Means and Standard Deviations in the Domains of Students' Self-Concept  
N = 255

Results on Table 4 indicate that the mean of students' perceptions of their academic self-confidence was slightly higher at 3.69 than students' perception of personal self-concept at 3.64, perception of their academic ability at 3.63 and academic achievement at 3.02. The results indicated that students' scores were all above average showing a positive self-concept.

From the findings, it is clear that students are positive about themselves as regards their academic abilities, achievement, self-confident and about their personalities in schools in Taita-Taveta County. The students were conscious about the self and could rate themselves positively irrespective of the schools they attended. This concurs with observations made by Ireson and Hallam (2009), Liu and Wang (2008), Moller, Streblov and Pohlmann (2009) on self-concept who noted that whether people focus on social roles and relationships or individual traits and characteristics in describing themselves depends significantly on their self-concept and immediate milieu. Teachers and school administrators have to consider various aspects of the classroom-learning environment that influence the development of more positive self-concept and reinforce on them. Thus, the development of student's self-concept will have to focus on classroom environment and what teachers do in those classrooms.

#### 4.3. Correlation Results

The hypothesis of this study was there was no statistically significant correlation between students' perception of the state of classroom-learning environment and self-concept in secondary schools in Taita-Taveta County. The learners' self-concept, the dependent variable, was evaluated under four domains; students' perception of their academic ability, academic achievement, academic self-confidence and the personal self-concept as may be predisposed by the classroom-learning environment. Students' responses on five-point Likert scale were summed up and means computed for each variable. The same was done for the independent variable; students' perceptions on the classroom-learning environment. The means of the independent and dependent variables were then correlated where Pearson Product-Moment correlations were used to establish the relationships in order to accept or reject the hypotheses at p-value 0.05 level of significance.

#### 4.4. Pearson Product-Moment Correlations between Students' Perceptions of the Classroom-Learning Environment and Their Self-Concept

The hypothesis of the study was that there is no statistically significant relationship between students' perception of the classroom-learning environment and self-concept in secondary schools in Taita-Taveta County. Four domains of the learners' perception of self-concept were employed; Perception of Academic Ability (PAA), Perception of Achievement (PA), Perception of Academic Self-Confidence (PASC) and Personal Self-Concept (PSC). The means of each of the four domains of the learners' self-concept plus the overall means of all four facets were computed and correlated with the mean responses of the

learners' perception of the classroom-learning environment. Table 5 presents the Pearson Product-moment correlations results between students' perceptions of the adequacy of school facilities on their self-concept.

	PAA	PA	PASC	PSC	Overall Mean Self-concept
Perception of classroom-learning environment	.524(**)	.420(**)	.444(**)	.429(**)	.507(**)
P-Value	.000	.000	.000	.000	.000

*Table 5: Pearson Product-Moment Correlations between Students' Perceptions of The Classroom-Learning Environment and Their Self-Concept*

\*\* Correlation is significant at p-value .05

Results presented on Table 5 show that a statistically significant and positive relationship existed between the students' perceptions of the classroom-learning environment and their self-concept ( $r = .507$  at p-value .05). Comparably, there was a strong correlation ( $r = .524$ ) between the students' perceptions on the classroom-learning environment and academic ability self-concept than was for academic confidence self-concept ( $r = .444$ ), personal self-concept ( $r = .429$ ) and achievement self-concept ( $r = .420$ ). On the basis of these results, the hypothesis that there was no statistically significant relationship between students' perceptions on the classroom-learning environment and their self-concept secondary schools in Taita-Taveta County was rejected. It was thus concluded that there was a statistically significant and positive relationship between the students' perceptions of the classroom-learning environment and their self-concept in secondary schools in Taita-Taveta County.

The results of this study corroborate with several studies that have been done elsewhere that have placed emphasis on the student environment and self-concept on one hand and student interest in learning and achievement at school on the other. In a study on students' perceptions of the educational environment at the School of Medical Sciences in Malays Universities, Arzuman, Yusoff and Chit (2010) noted that meaningful learning correlates positively with the students' perceptions of the educational environment. Further, studies by Higgins et al (2014), English and Chen (2011), Al Rukban, Khalil and Al-Zalabani (2010) on Educational environment in traditional and innovative medical schools in four undergraduate medical schools pointed out that the way learners perceive their environment is capable of affecting their emotions, attitudes and feelings; important aspects in the development of their self-concept and academic achievement. Further, studies carried out in low and middle-income countries of Hungary, Indonesia, Trinidad and Tobago and Venezuela also indicated that the learning environment accounted for up to 40 percent of the differences in student learning (Harbison & Hanushek, 1992). The findings were corroborated by Brown, Williams and Lynch (2011) who observed that children who grow up in unresponsive and uninspiring environments display a depressed mental activity, showing the significance of the environment in children's growth and development.

As regards the self-concept domains, the results concur with Ormrod (2000) who noted that there are three factors which definitely do influence the degree to which students form positive or negative self-concept; their own prior behaviors and performance, the behaviors of other individuals toward them and the expectations that others hold for their future performance. It is on this basis that an investigation sought to determine students' self-concept in the three domains of interest in the study. Each one offers insights as to how teachers, can enhance their students' self-concept since each domain of students' self-concept are equally important. These studies, including this one highlights the importance of learners' perceptions on the classroom-learning environment, attitudes and their self-concept; and their impact on the teaching-learning process and consequently academic achievement. According to Harbison and Hanushek (1992) students' academic achievement in developing countries is much more influenced by current factors within a school than is the case in developed countries where teaching resources are in abundance.

## 5. Conclusions

Several conclusions can be drawn from this study. First, it can be concluded that while a significant percent of the respondents indicated that the classroom learning environment was free from dirt, provided comfortable furniture and were well lit, some respondents felt that the thermal condition within the classroom-learning environment were unfavourable. Majority of the respondents indicated that the state of the school library was a hindrance to the learning process. It was not well ventilated, lacked adequate reading space and did not have relevant reading material. As regards student perception of their self-concept, it was clear that students were conscious about the self and could rate themselves positively irrespective of the schools they attended. They were positive about their academic abilities, achievement, self-confident and about their personalities in schools.

From correlation results, it was concluded that there was a statistically significant and positive relationship between students' perceptions of the classroom-learning environment and their self-concept. Comparatively, there was a strong correlation between the students' perceptions on the classroom-learning environment and academic ability self-concept than was for academic confidence self-concept, personal self-concept and achievement self-concept. This meant that some self-concept domains correlated strongly with independent variables than others. This implied that maximizing on self-concept in

domains of students' interest may be a means towards facilitating attainment of desirable outcomes in education such as academic effort and persistence at school tasks as well as improving learners' self-concept. This adds strength to the position that schools and teachers should take on the responsibility to create a classroom-learning environment in which students will grow their attitudes positively toward the self.

## 6. References

- i. Adeogun, A. A. & Olisaemeka, B. U. (2011). Influence of school climate on students' achievement and teacher productivity for sustainable development. *US-China Education Review*, 8(4), 552-557.
- ii. Afework H. T. & Asfaw B.M. (2014). The Availability of School Facilities and Their Effects on the Quality of Education in Government Primary Schools of Harari Regional State and East Hararghe Zone, Ethiopia. *Middle Eastern & African Journal of Educational Research, Issue 11*
- iii. Aghamolaei, T. & Fazel, I. (2010). Medical students' perceptions of the educational environment at an Iranian Medical Sciences University. *BMC Med Educ.* 2010; 10:87.
- iv. Al Rukban M.O, Khalil M.S, & Al-Zalabani A. (2010). Learning environment in medical schools adopting different educational strategies. *Educ Res Rev.* 2010;5(3):126–129.
- v. Arzuman H, Yusoff MS, & Chit SP. (2010). Big Sib students' perceptions of the educational environment at the School of Medical Sciences, University Sains Malaysia, using Dundee Ready Educational Environment Measure (DREEM) inventory. *Malays Journal of Medical Science.* 2010; 17(3):40–47.
- vi. Bakhshialiabad H, Bakhshi, M. & Hassanshahi, G. (2015). Students' perceptions of the academic learning environment in seven medical sciences courses based on DREEM. *Advances in Medical Education and Practice 2015:6 195–203.* Available from: <http://dx.doi.org/10.2147/AMEP.S60570>
- vii. Bandura, A. (2002). *Social Foundation for Thought and Action*. New Jersey: Prentice Hall.
- viii. Bergen, D. A. (2014). *The impact of school climate on student achievement in the middle schools of the commonwealth of Virginia: A quantitative analysis of existing data* (Unpublished doctoral dissertation). The George Washington University, USA.
- ix. Bronfenbrenner, U. (2000). Ecological theory. In A. Kazdin (Ed.), *Encyclopaedia of psychology*. Washington, DC: American Psychological Association and Oxford University Press.
- x. Brown T, Williams B. & Lynch M. (2011). The Australian DREEM: evaluating student perceptions of academic learning environments within eight health science courses. *International Journal of Medical Education.* 2011; 2:94–101.
- xi. English, T. & Chen, S. (2011). Self-concept consistency and culture: The differential impact of two forms of consistency. *Personality and Social Psychology Bulletin*
- xii. Gay, L.R., Mills, G.E. & Airasian, P. (2006). *Educational Research: Competences for Analysis and Application* (8th ed.). New York: Macmillan
- xiii. Government of Kenya (2008). Safety Standards Manual for Schools in Kenya. Government Printers, Nairobi
- xiv. Government of Kenya. (1997). *Taita-Taveta District Development Plan 1997-2002*. Nairobi: Government Printer.
- xv. Hannah, R. (2013). The Effect of Classroom Environment on Student Learning. *Honors Theses.* Paper 2375 at Scholar Works, Western Michigan University
- xvi. Harbison, W. & Hanushek, A. (1992). *Educational Performance of the Poor: Lessons from Rural Northern Brazil*. Washington D.C: World Bank, Oxford University Press.
- xvii. Higgins S, Hall E, Wall K, Woolner P. & McCaughey C. (2017). The impact of school environments: a literature review. The Centre for Learning and Teaching, School of Education, Communication and Language Science, University of Newcastle. Available from: <http://www.ncl.ac.uk/cflat/news/DCReport.pdf>. Accessed February 27, 2017. 19
- xviii. Ireson, J. & Hallam, S. (2009). Academic self-concepts in adolescence: Relations with achievement and ability grouping in schools. *Learning and Instruction, 19*, 201-213.
- xix. Jagero, N. O. (2011). An evaluation of school environmental factors affecting performance of boarding secondary students of Kenya. *African Journal of Education and Technology, 1*(1), 127-138.
- xx. Kathuri, J. & Pals, A.D. (1993). *Introduction to Educational Research*. Njoro, Kenya: Education Media Centre, Egerton University.
- xxi. Kerlinger, F. N. (1973). *Foundations of Behavioural Research*. New York: Holt, Rinehart and Winston Inc.
- xxii. Kikechi, W.R. (2003). *Factors Affecting Transition Rates from Primary to Secondary Schools in Taita-Taveta District*. Unpublished Master's Thesis, Kenyatta University, Kenya.
- xxiii. Liu, W. C. & Wang, C. K. J. (2008). Home environment and classroom climate: An investigation of their relation to students' academic self-concept in a streamed setting. *Current Psychology, 27*, 242-256.
- xxiv. McConnell, A. R. (2011). The multiple self-aspects framework: Self-concept representation of two forms of consistency. *Personality and Social Psychology Bulletin*
- xxv. Moller, J., Streblov, L. & Pohlmann, B. (2009). Achievement and self-concept of students with learning disabilities. *Social Psychology of Education, 12*, 113-122.
- xxvi. Mugenda, O.M. & Mugenda, A.G. (1999). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press.



- xxvii. Nyamosi, J. M. (2013). *Influence of school climate on pupils' performance at Kenya Certificate of Primary Education in Central division of Machakos District Kenya* (Unpublished M.Ed project). University of Nairobi, Nairobi.
- xxviii. Nzuve, S.N.M. (1999). *Elements of Organization Behaviour*. Nairobi: Nairobi University Press.
- xxix. Ormrod, J. E. (2000). *Educational Psychology: Developing Learners*. Prentice-Hall, Inc, New Jersey, USA. pp. 80-83.
- xxx. Santrock, J.W. (2005). *Adolescents* (10th ed.). New York: McGraw- Hill Inc.
- xxxi. Smith, R. Nesbrakken, G. Wirak, A. & Sonn, B. (2007). *The Link between Health, Social Issues and Secondary Education: Life Skills, Health and Civic Education*. Washington D.C: World Bank.
- xxxii. Stoll, L. & Fink, D. (1996). *Changing our Schools*. Buckingham: Open University Press.
- xxxiii. Teachers Service Commission (2007). Making secondary education affordable. *Teacher's Image*. Volume 13, 2007. Nairobi: Teachers Service Commission
- xxxiv. Tuz-Zahra A., Arif H.M. & Yousuf, I.M (2010). Relationship of Academic, Physical and Social Self-Concepts of Students with their Academic Achievement. *Contemporary Issues in Education Research – March 2010 Volume 3, Number 3*
- xxxv. UNESCO (2005). *Challenges of Implementing Free Primary Education in Kenya: Assessment Report*. Nairobi, Kenya: UNESCO.
- xxxvi. Usaini, M. I. & Bakar, N. A. (2015). The influence of school environment on academic performance of secondary school students in Kuala Terengganu, Malaysia. *International Conference on Empowering Islamic Civilization in the 21st Century, 6-7 September 2015, University Sultan Zainal Abidin, Malaysia*.
- xxxvii. Vygotsky, L.S. (1962). *Thought and Language*. Cambridge, MA: MIT Press.
- xxxviii. Wright A. (2011). *What impact does the learning environment have on self-concept?* Doctorate in Applied Educational Psychology School of Education, Communication and Language Sciences, Newcastle University.
- xxxix. Yara, P. O. (2010). Students' self-concept and mathematics achievement in some secondary schools in Southwestern Nigeria. *European Journal of Social Sciences*, 13(1), 127-132