

Social and Emotional Learning Competencies and Academic Achievement: A Study on Students in Senior High Schools in Ghana

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Abstract

The concept of Social and emotional learning (SEL) is instituted on the positive youth development which promotes the needs of youth to be addressed by building backgrounds that encourage outcomes conforming to school achievement, correspondingly sympathetic relationships with adults and peers, problem solving, and civic engagement amongst others. Much focus has been on students' achievement, thus passing examination and neglecting the other very important aspect of students' life which are acquiring skills in problem sovling, building relationships just to mention a few. The study thus sought to examine students' own social and emotional learning competencies (self awareness, social awareness, self-management and responsible decision making) in the Greater Accra and Ashanti Regions of Ghana. One hundred and thirty students constituted the sample. Eighty from Kumasi metro schools and fifty from Accra Metro schools in the Ashanti and Greater Accra regions respectively. The SELC questionnaire was used to collect data while the convenient sampling technique was used in selecting participants. Results indicated amongs others that female students scored higher on the social emotional competencies than their male counterparts.

Keywords: Social and Emotional Learning Competencies, Social and Emotional Learning, self awareness, social awareness, self-management, responsible decision making, Problem solving, Ghana.

1. Introduction

The rising wave of examination malpractices in the country sent a lot of thoughts that motivated the conduction of this research. In reading around the subject area, and reviewing related articles, there was a write up on Ghanaweb, myjoyonline.com by Stan Dugah about a student from keta senior high that hit the nail right on the head. The student stated, "It was sometime in May, 2009. I was living with friends in a rented house in Keta, and we were preparing for the 2009 May/June WASSCE. We were four; two of us in Ketasco and the other two in Ketabusco. On the eve of the Mathematics paper, sometime in the evening, a girl from Zion College, Anloga, being a girlfriend to one of the Busco boys, came visiting, and showed us some questions she got from God knows where. I recall her telling us that they were the Maths questions that will be appearing in the exam the very next day. We were very good students, hence, were not very much enthusiastic of getting hold of some easy "apor", (leaked examination questions) But we took a look at it anyway, and had our doubts confirmed. The questions appeared "too cheap" to be the ones that will appear in the exams; so said we among ourselves, and didn't even bother solving them. Come the next day, we went to write the Maths paper and those very questions appeared. That was the first time I had the experience of knowing that exam questions can truly get leaked. Later on I wondered how this could be, and surmised that it was all because we have a messed up education system that focuses more on exam passing than skill possession and imaginative/creative thinking, hence the unbounded desire on the part of most students (especially the super lazy ones, which is the

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majority) to pass their exams by hook or crook". He further on stated that upon hearing the news of examination malpractices that led to the cancellation of the Basic Education Certificate Examination (BECE) he asked, "Is it not because we have an education system that prefers rote learning to study in depth? Is it not because we have an education system that is tailored to exam passing more than the acquisition of life skills, critical thinking, and imaginative thought on the part of students?"...

This goes a long way in lending support to researchers who have posited that there is a significant gap between what students' learn in the classroom and that of what they acquire in their real or future world, and education being examination centerd rather than promoting students' overall success (Anamuah-Mensah & Towse, 1995; Stevenson, 1995, Tengey & Ganu; 2015). As one of the main national establishments responsible for conveying information and principles from one generation to the next, schools are to characteristically be involved in seeing to the social-emotional well-being of their students, in addition to their academic achievements.

Social-emotional learning has developed as an important, proper and formal method used in schools to provide guidance for students' behaviour. Social-emotional learning focuses on the skills and attitudes needed to function in relevant social environments. Social-emotional learning focuses mainly on the influence of problem solving (Elias, Zins, Weissberg et al., 1997; Huitt, 2004). On the other hand, academic achievement is the main focus of schools and stakeholders on preparation of students towards passing examinations. Academic achievement purposely focuses on classroom teachers primarily taking responsibility for student academic achievement (Darling-Hammond, 2000), and most schools efficiently and effectively establish themselves towards that task (Engelmann & Carnine, 1991). Academic achievement as measured by standardized test with the main focus of the practice of classroom teachers and school administrators.

Nobel Laureate, James Heckman, specified that the greatestmost achievements on education investments are "from nurturing children's non-cognitive skills, giving them social, emotional and behavioural benefits that lead to success later in life..." (Heckman & Masterov, 2004).

1.1 Purpose of the study

Most educators and stakeholders concentrate mostly on the classroom knowledge and teaching to the detriment of teachings outside of the classroom which encompasses the overall education of students. More so, most curricula are examination-focussed, a reason of which educators take tremendously instructive classroom technique and approach to complete the curriculum just to fufil the expectations of students, parents and guardians, heads of institutions and other stakeholders who evaluate educational achievement mainly by results (Tengey & Ganu; 2015). Concentration has been on students' learning hard, "chew, pour, pass and forget" to the extent that, students pass examinations excellently yet lag behind when it comes to other spheres of their lives, for instance; public speaking, making presentations and taking up career related goals. (Tengey, 2015). Sufficient evidence have shown that students are not adequately prepared for the outside worldand of work by the educational system not only in the developing countries but also in the developed countries. Adequate efforts are being made to put things right, but with hazy levels of success (Noah & Eckstein, 1988; Anamuah-Mensah & Towse, 1995; Stevenson, 1995; Muskin, 1997; Tabron & Yang, 1997, Tengey & Ganu, 2015: Tengey, 2015). The studysought to explore student's own (selfawareness, social awareness, self-management and responsible decision making)social and emotional learning competencies in senior high schools in the Accra and Kumasi Metropolis

in the Greater Accra and Ashanti Regions in Ghana respectively. Relationship management was not included in the study purposely because it focuses on others. The study sought to investigate students own social and emotional competncies. The study sought to find out how well students knew and understood their own (intrapersonal) emotions.

2. Theoretical framework

2.1.1 Emotional intelligence and student's emotional learning

Robust school environments rely on the formation of a school culture that allows children to develop emotional intelligence competencies. Emotional intelligence is the skill to use emotions positively, successfully and competently. Emotional Intelligence competencies are developed from the ability to be aware of one's own emotions and inclinations of behaviour and to be able to handle negative or obstructive emotions resourcefully, to share in hopeful, positive and enthusiatic relationships and understandings with others in a way that increases learning and overall satisfaction. Researchers have postulated that total life satisfaction emanates from the advancement of Pro- social Behaviour, the antecedent of Empathy (Caprera et al., 2000; Malecki & Elliott, 2002). Further studies reveals emotional intelligence is strongly connected to staying in school, barring risk behaviors, and nurturing health, happiness and life success. (Shriver & Weissberg, 2005).

Lots of organizations have arisen to help schools and organizations establish emotional intelligence and social-emotional learning programs, including The Collaborative for Academic, Social and Emotional Learning (CASEL,2003). Emotional intelligence is emerging as a serious component for assisting and aiding in high achievement, retention, and positive behavior and also as promoting life success. Progressively, schools and educational establishments are engaging emotional intelligence in pursuing and advancing a systemic and total solution to develop outcomes both academic and social for example school attrition, studentsatisfaction, peer relations and well-being.

The fundermental stage in the emotional intelligence course is being conscious of our emotions and recognizing them. Research has it that affirming our emotions allows us to take a break and reflect on them before taking a move or an action, which permits a relationship between emotional and cognitive processes (Barbey, 2012). The emotional mind has to be cultivated to train and rehearse the skills of empathy and reflection, receive response from the surrounding environment, and measure the correctness of decisions made as a result of emotional contribution.

Research has it that identifying feelings starts to calm the mind, lessening our emotional reaction (Lieberman et al, 2007). Discussions on feelings and considering different opinions allows children to create communication between the emotional brain and the normal brain. When this is done, individuals can pause and reflect on the significance and importance of the emotions they are feeling and experiencing, focus and direct emotions and select the best way of accomplishment.

2.1.2 Students' social and emotional learning

There is a significant gap between what students' learn in the classroom and that of what they acquire in their real or future world (Anamuah-Mensah & Towse, 1995; Stevenson, 1995, Tengey & Ganu; 2015). Students' Social and Emotional Learning (SEL) otherwise known as "education of the whole child or total child education" can be defined as the way in which individuals become socially and emotionally intelligent. Futhermore, some generally define SEL as "the process through which children enhance their ability to integrate thinking, feeling, and behaving to achieve important life tasks" (Zins, Bloodworth, et al., 2007, p. 194).

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Programs put in place towards improving SEL are scheduled to help this process in systematic and all-inclusive manners within schools. The development and evaluation of SEL emanate from the early known writings about social and emotional skills and the increasing amount of interest and research on social or emotional intelligences over the past 150 years. This classically began with Darwin's assessment of the significance of emotion in evolution, in The Expression of the Emotions in Man and Animals (Goleman, 1995; Mayer, 2001).

Thorndike's proposal of a "social intelligence" has also been cited to understand others and relate to them efficiently and effectivelyto overall intelligence (Elias, 2001). Sternberg's work (1985) on what he at that time referred to as "practical intelligence" established more empirical support for such a concept and ideology, and Gardner's research (1993) on multiple intelligences defined and supported two distinct and related components; intrapersonal (emotional) and interpersonal (social) intelligences. The Association on the School-based Promotion of Social Competence (1994) accentuated the importance of integrating cognition, affect, and behavior to address developmental and relative challenges and tasks. Prior to this idea, the study of intelligence, emotion, and social relations tended to be separate; with Sternberg and Gardner's work, it became clear that these phenomena were related to one another (Mayer, 2001), although others (e.g., Piaget and Dewey) had noted these interrelationships much earlier. By the late 1980s, much evidence supported the idea of incorporated social and emotional skills.

Mayer and Salovey also played aninfluential role in thoroughly defining and finding empirical backing for "emotional intelligence," as it is understood currently. In the first half of the 1990s, they produced a series of reviews and studies that offered support for emotional intelligence, provided a firm definition for the construct and a measure for assessing it, and demonstrated its validity and reliability as an intelligence (Mayer, 2001). Goleman propagated the concept and added some social components to the definition in his book, Emotional Intelligence (1995). Soonafterwards, Reuven Bar-On's (Bar-On, Maree, & Elias, 2007) extensive work in defining and assessing emotional intelligence came to fame. The SEL undertaking originates from scientific research on emotional intelligence (EI; Salovey & Mayer, 1990), According to Mayer, Roberts, & Barsade (2008) these abilities are likely to be associated with social competence, adaptation and academic success.

2.2 Theories that underpin SEL

The notion of SEL is founded on the positive youth development which advocates the needs of youth to be addressed by building backgrounds or settings that encourage outcomes like school achievement, mutually sympathetic relationships with adults and peers, problem solving, and civic engagement (Catalano et al., 2004; Greenberg et al., 2003). Attempts to support positive youth development are different from those talored towards lessening risk factors because they are tailored towards cultivating skills, building assets, and promoting flexibility to attaining positive outcomes (Catalano, Hawkins, Berglund, Pollard, & Arthur, 2002). These Positive youth development interventions such as SEL programming typically use a skill-building, whole-child technique which is based on maintaining assets and not only on preventing problems. Due to the fact that Schools are mainly locations which serve the educational and developmental needs of youth, they therefore are the persuasive targets for common and universal efforts to promote positive youth development.

Zigler and Bishop-Josef (2006) among other researchers are of the view that, to achieve the overall educational goal, school-based programming needs to meet two standards: (1) enhance the social and emotional assets and learning of students across the curriculum, and (2) improve the quality of the environments in which academic, social, and emotional

learning occurs. The attempt therefore, for the education of the whole child to be successful will depend on the degree to which learning occurs in caring, supportive, safe, and empowering backgrounds and locations which is deeply ingrained in the ecological systems theory and self-determination theory.

The founder of the Ecological systems theory, Bronfenbrenner in 1979, stipulates that, the upbringings youth inhabit, for instance, school, shape their development characteristics of school backgrounds that are associated to positive youth development include opportunities for empowerment and skill building. Catalano and colleagues in 2004 also are of the opinion that the existence of supportive adults and peers help in shaping up students thus leading to their safety and orderliness.

The Self Determination theory postulates that, youth are more likely to flourish when in environments that address their social and emotional needs like experiencing meaningful relationships, having confidence in their abilities, and feeling independent (Deci & Ryan, 1985). Students are more likely to thrive in classrooms that foster meaningful, caring, safe and empowering interactions (Battistich, Solomon, Watson, & Schaps, 1997).

2.3 Scope of SEL

Emotional Intelligence has been defined as the mental abilities associated with processing and responding to emotions, including recognizing the expression of emotions in others, using emotions to enhance thinking, and regulating emotions to drive effective behaviours (Mayer & Salovey, 1997; Salovey & Mayer, 1990). The Collaborative for Academic, Social and Emotional Learning (CASEL), a non-profit entity that advocates and provides leadership for high quality SEL programming and learning standards, classifies five core competencies related to SEL. They are as follows classified; self-awareness, social awareness, self management, relationship skills and responsible decision making.

3. Methodology

3.1 Research design

A survey design was employed in the study. According to (Cohen, 1988), for a minimum difference to be detected among the sampled population in a survey research, the researcher needs a minimum sample of 64 respondents in each group and to obtain a statistical power of 0.80 at 0.05 level of significance 64 respondents will be necessary in each group. One hundred and thirty (130) respondents were employed in the study. Eighty (80) senior high school students from 8 schools from the Kumasi Metropolis in the Ashanti Region, and fifty (50) students from five (5) schools in the Accra Metropolis in the Greater Accra region of Ghana.

3.2 Sampling technique

The convenient sampling method was used in selecting the schools and simple random technique was used in selecting respondents for the study. The study consisted of one hundred and thirty (130) senior high school students from senior high levels one to three (SHS 1-3). Ten (10) students were selected from thirteen schools, eight (8) from Kumasi metro schools which are Opoku Ware senior high, Kwame Nkrumah university senior high (KNUST SHS), Ghana Academy senior high, Kumasi senior high, Prempeh College, Asanteman senior high, Kumasi senior high technical and Kumasi Wesley Girls senior high. The other schools which were selected from the Greater Accra region were Labone senior High, St. Thomas Acquianas senior high, Teshie Presbyterian senior high, Nungua Presbyterian Commercial and senior

high school and Nungua senior high school. Selection was based on volutary participation hence the use of convenient and simple random selection tectniques.

Table 1. Demographics of the sample

VARIABLE	NO.	PERCENTAGE
Sex Male Female	82	63.1%
Age	42	36.9%
• 15	13	10%
1617	25 47	19.2% 36.2%
• 18	26	20%
• 19	13	10%
• 20	5 1	3.8% 0.8%
• 21 Schools	1	0.070
• Kumasi	80	61.6%
• Accra	50	38.4%
SHS1SHS 2SHS 3	14 49 67	10.8% 37.7% 51.5%

Total Responses 130

4. Presentation of results

Table 2. Summary of independent t test results, means and standard deviations for Self-Awareness, Social Awareness, Relationship Management and Responsible Decision Making categorized by Region of School

	Region of			Std.			
	School	N	Mean	Deviation	t	df	p
Self-Awareness	Greater Accra	50	10.98	4.15	1.630	128	.105
	Ashanti	80	9.90	3.35			
Social Awareness	Greater Accra	50	18.06	7.05	1.625	128	.107
	Ashanti	80	16.18	6.02			
Self- Management	Greater Accra	50	12.56	4.31	.145	128	.885
	Ashanti	80	12.70	5.92			
Responsible Decision- Making	Greater Accra	50	10.42	3.93	2.276	128	.024
	Ashanti	80	8.80	3.96			

Results of the independent t test indicated that there is a significant difference in Responsible Decision-Making among students in schools in the Greater Accra Region and those in the Ashanti Region [t(128) = 2.276, p = .024]. At the .05 level of significance, Students in schools in the Greater Accra Region (M = 10.42, SD = 3.93) engaged more in responsible decision-making than their counterparts in the Ashanti Region (M = 8.80, SD = 3.96). The results however showed no significant difference in Self-Awareness [t(128) = 1.630, p = .105], Social Awareness [t(128) = 1.625, p = .107] and Self-Management [t(128) = .145, p = .885] among students in schools in both the Greater Accra and Ashanti Regions.

Table 3. Summary of independent t test results, means and standard deviations for Self-Awareness, Social Awareness, Self-Management and Responsible Decision Making categorized by Gender

				Std.			
	Gender	\mathbf{N}	Mean	Deviation	t	df	p
Self-Awareness	Female	48	11.77	4.70	3.588	128	.000
	Male	82	9.46	2.64			
Social Awareness	Female	48	19.98	7.21	4.438	128	.000
	Male	82	15.10	5.27			
Self- Management	Female	48	14.02	5.75	2.280	128	.024
	Male	82	11.84	4.95			
Responsible	Female	48	10.98	4.78	3.531	128	.001
Decision-Making	Male	82	8.51	3.18			

An independent t test performed to examine gender differences among the study variables revealed a significant difference among all four variables in terms of gender; Self-Awareness [t(128) = 3.588, p = .000], Social Awareness [t(128) = 4.438, p = .000], Self- Management [t(128) = 2.280, p = .024] and Responsible Decision-making [t(128) = 3.531, p = .001]. A look at the means revealed Females (M = 11.77, SD = 4.70) were generally more self-aware than Males (M = 9.46, SD = 2.64). Also, Females (M = 19.98, SD = 7.21) scored higher on Social Awareness than Males (M = 15.10, SD = 5.27). Again, Females (M = 14.02, SD = 5.75) scored higher on Self- Management than their Male counterparts (M = 11.84, SD = 4.95). Lastly, Females (M = 10.98, SD = 4.78) scored higher on Responsible Decision-making than Males (M = 8.51, SD = 3.18).

Table 4. Pearson r test among the variables of the study

			•			_
		1	2	3	4	5
1.	Age	-				
2.	Self-Awareness	.159	-			
3.	Social Awareness	101	.442**	-		
4.	Self- Management	080	.154	.418**	-	
5.	Responsible Decision-Making	.144	.520**	.435**	.149	-

The Pearson's r test revealed a significant positive relationship between Self-awareness and Social awareness (r = .442, p < .01). A significant positive relationship was also found between Social Awareness and Self-Management (r = .418, p < .01). Self-awareness and Self-management were also found to be significantly related positively (r = .520, p < .01). Finally, Social Awareness and Responsible decision-making were also found to be significantly related positively (r = .435, p < .01). All other relationships were not statistically significant.

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Table 5. Summary of means and standard deviations for Self-Awareness, Social Awareness, Self-Management and Responsible Decision Making based on Level of study

		N	Mean	Std. Deviation
Self-Awareness	SHS 1	14	7.79	2.01
	SHS 2	49	10.59	3.89
	SHS 3	67	10.64	3.66
	Total	130	10.32	3.70
Social Awareness	SHS 1	14	12.93	5.51
	SHS 2	49	17.43	6.13
	SHS 3	67	17.34	6.70
	Total	130	16.90	6.48
Self- Management	SHS 1	14	10.79	4.89
	SHS 2	49	13.35	5.49
	SHS 3	67	12.52	5.30
	Total	130	12.65	5.35
Responsible	SHS 1	14	8.21	3.62
Decision Making	SHS 2	49	9.82	4.16
	SHS 3	67	9.39	3.98
	Total	130	9.42	4.01

Table 6. Summary of one-way ANOVA results for Self-Awareness, Social Awareness, Self-Management and Responsible Decision Making based on Level of study

		Sum of	•	Mean		
		Squares	df	Square	F	Sig.
Self- Awareness	Between Groups	100.47	2	50.236	3.835	.024
	Within Groups	1663.60	127	13.099		
	Total	1764.07	129			
Social	Between Groups	247.67	2	123.833	3.047	.051
Awareness	Within Groups	5162.03	127	40.646		
	Total	5409.70	129			
Self-	Between Groups	73.55	2	36.774	1.293	.278
Management	Within Groups	3612.18	127	28.442		
	Total	3685.72	129			
Responsible Decision	Between Groups	28.12	2	14.058	.872	.421
Making	Within Groups	2047.62	127	16.123		
	Total	2075.73	129			

Summary of results of the one-way ANOVA indicate that at the p< .05 level of significance, there was a significant difference in Self Awareness among the three study

.68

1.000

levels (i.e. SHS 1, SHS 2 and SHS 3) [F(2, 127) = 3.835, p = .024]. There was however no significant difference in Social Awareness [F(2, 127) = 3.047, p = .051], Self- Management [F(2, 127) = 1.293, p = .024] and Responsible Decision making [F(2, 127) = .872, p = .421] among the three study levels.

A Post-hoc analysis using the Bonferroni test was conducted to find out the exact differences that existed in self-awareness among the three levels.

Dependent Variable	(I) Level	(J) Level	Mean Difference (I-J)	Std. Error	Sig.
Self- Awareness	SHS 1	SHS 2	2.81*	1.10	.035
		SHS 3	2.86^*	1.06	.025
	SHS 2	SHS 1	2.81*	1.10	.035
		SHS 3	.05	.68	1.000
	SHS 3	SHS 1	2.86^*	1.06	.025

Table 4. Summary of Post Hoc analysis for Self-Awareness based on Level of study

SHS 2

Multiple comparisons using the Bonferroni test indicated that the mean Self-awareness score for SHS 2 (M=10.59, SD=3.89) was significantly higher than that for SHS 1 (M=7.79, SD=2.01) but not SHS 3 (M=10.64, SD=3.66). The mean self-awareness score for SHS 3 was also significantly higher than that for SHS 1.

.05

5. Discussion

Current findings indicate that there is a significant difference in Responsible Decision-Making among students in schools in the Greater Accra Region and those in the Ashanti Region. Students in schools in the Greater Accra Region engaged more in responsible decision-making than their counterparts in the Ashanti Region. Greater Accra region is the capital city of the country, therefore more urban than Ashanti region. There is the possibility that there are more resources in the urban areas and thus schools in the urban areas which include Greater Accra may be enjoying such resources and facilities. Again, most of educators for instance teachers and school counselors who help in building students up prefer to live in the capital city than in other regions. This could also be a factor contributing to students in Greater Accra scoring higher on Responsible decision making. The results on the other hand, showed no significant difference in Self-Awareness, Social Awareness and Self-Management among students in schools in both the Greater Accra and Ashanti Regions.

Furthermore, results indicated that there was a significant difference among all four variables in terms of gender. Females scored higher than their male counterparts thus were generally more self-aware of themselves, than their male counterparts. Also, females scored higher on Social Awareness than Males. Again, Females scored higher on Self- Management than their Male counterparts. Lastly, Females scored higher on Responsible Decision-making than Males. Longitudinal data suggests that these differences can be somehow explained by behavioral and developmental transformations between boys and girls (Golden, Katz, & Kuziemko, 2006). Moreso, results indicate that there was a significant difference in Self Awareness among the three study levels (i.e. SHS 1, SHS 2 and SHS 3). Students in SHS 2 scored higher on Self-awareness than SHS 3 students. SHS 3 students also scored higher than SHS1 students. One possible reason for the self-awareness score of SHS 2 students being higher than SHS 3 students could be that, SHS 3 students were concentrating on their studies towards their final exams at the time the data was collected for the study. Also, SHS 1 students had just reported to their various schools and barely settling down at the time data was collected.

^{*.} The mean difference is significant at the 0.05 level.

The current study differs in emphasis from previous research by focusing exclusively on social-emotional learning competencies of students in senior high schools. SEL is based on five fundamental competencies which are self-awareness, self -management, social awareness, relationship skills and responsible decision making. The current study was limited to four of the competencies which are self-awareness, self -management, social awareness and responsible decision making. These four competencies are based on students own competencies. Relationship management was not included in the study because the researcher wanted to know if students were aware of their own emotions. It is when students are aware of and understand themselves and their emotions that they better understand others. Future or additional research is required on comparing Relationship management (interpersonal skills) and the other SEL competencies; self-awareness, social awareness, self- management and responsible decision making (intrapersonal skills).

6. Conclusion

There is a significant gap between what students' learn in the classroom and what they acquire in their real or future world. Students' Social and Emotional Learning (SEL) which is also known as "total child education" is refered to as the way in which individuals become socially and emotionally intelligent. Usually, it is the process through which children enhance their ability to integrate thinking, feeling, and behaving to achieve important life tasks. Summary of results of the one-way ANOVA indicate that there was a significant difference in Self Awareness among the three study levels (ie. SHS 1, SHS 2 and SHS 3). There was therefore the need to perform multiple comparisons using Bonferroni test. Results indicated that the mean Self-awareness score for SHS 2 was significantly higher than that for SHS 1 but not for SHS 3. The mean self-awareness score for SHS 3 was also significantly higher than that for SHS 1. There was nonetheless no significant difference in Social Awareness, Self-Management and Responsible Decision making among the three study levels. Again, results indicated that, female students scored higher on all attributes than their male counterparts.

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