# Effective Classroom Management, Self Esteem and Academic Achievement

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Abstract: The study sought to establish how effective classroom management skills enhance students' self-esteem and academic achievement. The population of the study was all second year Arts one (1) and Arts two (2) students of Dormaa Senior High School and the stratified and systematic sampling techniques were used to select one hundred and ten students comprising fifty-two (52) males and fifty-eight (58) females who were chosen as sample for the study. The cross-sectional survey design was used to collect data for the study. The major instruments used in this study were the Rosenberg Self-Esteem scale, Behavioral and Instructional Management Scale and end of term score of the participants in their core subjects. Four (4) hypotheses were tested and the findings of the study established that effective classroom management skills lead to high self-esteem. It was also established that effective classroom management leads to high academic achievement in students. The results showed that selfesteem have no effect on academic achievement and again, there are no differences between self-esteem and gender.

Keywords: Classroom management, self-esteem, academic achievement.

# 1. INTRODUCTION

Education is the second item on the Millennium Challenge Goals and a key priority of every government. It is the most important investment a country can make in its people for socio-economic development. It is seen as one of the greatest tools of social mobility in every society. Its positive effects of increasing productivity, creativity, entrepreneur ship and technological advancements are the reason why most governments pay critical attention to it. In fact the 1992 constitution states emphatically in Chapter 6, section 38, sub-sections 1 and 2:

The government shall provide educational facilities at all levels and in all regions of Ghana and shall, to a greater extent, be visible to make those facilities available to all citizens...

It is for this reason that several studies have been conducted to see how best instruction can be delivered from the tutor to the learner to effectively enhance the teaching-learning process (Brouwer and Tomic (2000); Rogers, 1961; Lahey 2003). Principally, most of these studies examined the relationship between effective classroom management and ones self-esteem and how this conditions affects ones academic achievement. This study also seeks to add to the knowledge base how these factors correlates to enhance or frustrates ones academic achievement among students in the abovementioned research setting.

The classroom is a shelter for both the learners and teachers to engage in educative activities, thus it can be said to be the immediate management environment for formal knowledge acquisition. It is made up of the teacher, the learning equipment and the learning environment.

Loomiz (1980) defined management as "a method where a group of people at the highest level of organization plan, organize, communicate, coordinate, control and direct the actions and activities of the people who work for the organization towards the achievement of organizational objectives". It can also be seen as the process of designing and maintaining any setting in which people work in groups for the purpose of accomplishing predetermined goals. The idea of "any setting" equally indicates that management is applicable to all establishments which do not exonerate educational setting. Effective management of the classroom is the most significant strategies to a successful teachers' delivery of instruction (Ben,2006). Brown (1995) defined classroom management as a "process involving the organization of certain academic tasks which are essential for effective teaching and learning in a specific set up". Classroom management is a set of articulate behavior which a teacher uses to establish and maintain conditions to enable learners achieve instructional objectives efficiently (Jones, 1995).

Self-esteem on the other hand is how favorably one evaluates himself or herself (Baumeister, 2008). Allport (1961) asserted that self-esteem " is the feeling of pride that results when the child accomplishes things or the child's success in mastering tasks". In more general terms, self-esteem is that feeling of pride and excitation that comes along with accomplishment. It can be frustrated or enhanced through our day to day interactions with significant others such as peers, parents and teachers (Rogers,1961). According to Baumeister (2008), if ones self-esteem is enhanced, the person is more likely to strive to achieve higher goals and aspirations than someone with low self-esteem. This makes it imperative for teachers and educators to try as much as possible to enhance the self-esteem of their learners. It can be inferred from the above authoritative opinions, the indisputable correlation of effective classroom management and self-esteem, and its tendency of enhancing or frustrating students' academic achievement.

We cannot achieve the goal of quality education without first understanding how classroom dynamics (effective classroom management skills) affects students' self-esteem which consequently affects their academic achievement.

# 2. THEORETICAL PERSPECTIVE

#### **Burrhuss Frederick Skinners' Operant Conditioning / Reinforcement Theory:**

Skinner as a renowned learning theorist in the 1930's and 1940's emphasized his research on how organisms learn, regardless of their potentials or species. Even though some behaviors are clearly prompted by specific stimuli just like Pavlovs' dog (1927), Skinner proposed that reflexive behavior accounts for only a small proportion of all actions. Skinner proposed another class of behavior which he labelled as operant behaviors because they operate on the environment in the apparent absence of any unconditioned stimuli such as food. Skinner focused his work on the relationship between behavior and its consequences. The use of pleasant and unpleasant consequences to modify behavior is often referred to as operant conditioning. Lahey (2003) defined operant conditioning as learning in which the consequences of behavior leads to changes in the probability of its occurrence. In regard to the classroom, Skinner (Conte, 1994) stated that by rewarding students for good behavior and punishing or ignoring wrong behavior, students will come to understand how to behave in the classroom environment which will invariably result in a well-behaved class. Rewarding students for good behavior and punishing them for bad behavior is a major facet of the reinforcement theory which is an extension of the operant conditioning theory and is the most applied classroom management theory in our part of the world where we clap for well-behaved students and spank the ill-behaved ones. This enable teachers to control and manage the classroom environment.

#### **Ryckman Self – Enhancement Theory:**

According to self-enhancement theory, individuals are influenced to maintain their self-esteem in an optimistic way (Ryckman, 2004). Rogers (1959) conceptualized that an individual's self-esteem may be viewed in both the experience of the "real" self and the "ideal" self. Congruency occurs when the is an agreement between the "real " and the "ideal 'self. Self-discrepancy theory implies that individuals become distressed when our "real " self is different from our "ideal " self and this can have a great impact on how we perform on tasks including academic ability. Self-verification theory also refers to the tendency of individuals to seek positive or negative information about themselves. Individuals have an internal drive to feel good about themselves and thus doing badly on a task and being harshly rebuked by significant others such as teachers can badly damage an individuals' self-esteem. This

theory therefore entreat teachers to always encourage students rather than rebuke them so that the self-esteem of the students will not be frustrated.

# 3. REVIEW OF RELATED STUDIES

A study conducted by Ruvuza (2012) at the United States International University in East Africa using thirtyseven (37) participants established that effective classroom management skills enhances students' self-esteems. Eze (2002) conducted a study that established that a good teacher-student relationship fosters the psychological disposition (self-esteem) of students which in turn enhances their academic achievement. This same study was replicated by Santrock in 2004 and he also established that a good teacher-student relationship positively affects students' self-esteem.

Adeyemo (2012) conducted a study using ten (10) randomly selected secondary schools in Lagos state, Nigeria to examine the relationship between effective classroom management and students' academic achievement in physics subject. The study showed that effective classroom management have a strong positive influence on students' academic achievement. Another study conducted in the Middle East University by Seda Yasar (2008) showed that the student-centered approach was the best approach to effective classroom management and it positively enhances students' academic achievement. A number of studies conducted by researchers such as Edmund and Stough (2001), Ball and Bass (2003), Brouwer and Tomic (2000), Philip, Sadler, Gerhard, Nancy and Jamie (2013) have all established that effective classroom management skills leads to a positive improvement in students' academic achievement. Meanwhile, a study conducted by (D'Agostino & Powers, 2009) did not establish any relationship between effective classroom management and students' academic achievement.

A study by Iniama (2004) at the University of Virgin Island, St. Thomas campus examined the relationship between self-esteem and academic performance of freshmen of the institution. The results showed that there is no significant relationship between a student's self-esteem and Grade Point Average (GPA) index score which was used to measure their academic achievement. This results from this study is in consistent with similar results obtained by Tobias, Fang and Bang (2008) who also found no relationship between self-esteem and academic achievement of students.

A study conducted by Abiam and Odok (2008), Howes (2002) and Sinnes (2006) found no differences in self-esteem among adolescent males and females students but Naderi, Abdullah, Aizan, Sharir, Kumar, (2009) showed that there is a difference in self-esteem between males and females (Naderi, Abdullah, Aizan, Sharir, Kumar, 2009; SarAbadaniTafreshi, 2006).

With these contradictions, we will need a lot of research to ascertain the truth or otherwise of the assertion that self-esteem will increase academic achievement and whether effective classroom management skills leads to high academic achievement among students.

#### Statement of hypotheses:

H<sub>1</sub>: Effective classroom management skills enhance self-esteem of students.

H<sub>2</sub>: Students who have high self-esteem have high academic achievement than students who do not.

H<sub>3</sub>: There is a positive relationship between effective classroom management and academic achievement.

H<sub>4</sub>: Male students have high self-esteem than female students.

#### Methodology:

The cross-sectional survey design was used to gather relevant information from the participants.

The population of the study was second year Arts one (2A1) and Arts two (2A2) students of Dormaa Senior High School in the Dormaa Municipality in the Brong Ahafo region.

The researcher used the stratified and the systematic sampling techniques which both fall under the probability sampling technique which are collectively called multistage sampling technique. In all one hundred and ten (110) were sampled for the study.

The Rosenberg Self-Esteem Scale was used as the scale to measure the self-esteem of the participants. The Rosenberg Self-Esteem Scale was developed by Rosenberg (1965) to measure an individual's self-esteem. The scale has an internal consistency of = 0.77 and a minimum coefficient of reproducibility of = 0.90. A varied selection of independent studies each using samples such as parents, men over sixty (60), high school students and civil servants showed an Alpha Coefficient ranging from 0.72 to 0.87 which are all fairly high.

The Rosenberg Self-Esteem Scale is a ten (10) point Likert-scale with responses ranging from A = Strongly Agree, B=Agree, C=Disagree and D=Strongly Disagree. The scoring was done in such a way that for items 1, 3, 4, 7, and 10, a response of A scored four (4) points, B scored three (3) points, C scored two (2) points and D scored one (1) point. For items 2, 6, 8 and 9, a response of A scored one (1) point, B scored two (2) points, C scored three (3) points and D scored four (4) points. The items 2, 6, 8 and 9 are the reversal items on the scale. In all the highest score a participant could get was forty (40) and the least a participant could score was ten (10). The scoring was done in such a way that a score from nineteen (19) to ten (10) was considered low self-esteem and a score from twenty (20) to forty (40) was considered a high self-esteem.

Academic achievement ability of the participants was acquired by calculating the average of the raw scores of the end of term examination in their core subjects namely; Mathematics, English Language, Integrated Science and Social Studies. The average of these scores determines a participants academic achievement. The academic achievement of the participants was derived from the raw scores of their core subjects namely; English Language, Mathematics, Integrated Science and Social Studies. The researcher computed the average of these raw scores of their end of term examination which he was able to acquire from the office of the Assistant Headmaster in charge of academics and the average served as the basis from which their academic achievement was measured

Effective classroom management skills was also measured using the Behavioral and Instructional Management Scale (BIMS) developed by Martin and Sass (2009) at the University of Texas in the United States of America. It has an internal consistency = 0.80 and Alpha coefficient of 0.77.

The Behavioral and Instructional Management Scale (BIMS) is also a twenty-four (24) point Likert-scale having responses of A, B, C, D and E. A score from twenty four (24) to seventy one (71) was considered as less effective and a score of seventy two (72) to one hundred and twenty (120) was considered as very effective.

#### 4. FINDINGS AND DISCUSSIONS

### Demographic data:

The participants who took part in this study were one hundred and ten (110) in number. Out of this, the number of males were fifty two (52) which represented 47.27 % and fifty eight (58) were females which represented 52.72%. On religious background, seven (7) of the participants were Muslims which represented 6.63 % and one hundred and three (103) were Christians which represented 93.64 %. The age interval was 17 - 21 years with the average age being eighteen (18) years.

# **Hypotheses Testing:**

#### H<sub>1</sub>: Effective classroom management skills enhance self-esteem of students

Table 4.1: Table showing the differences in effective classroom management skills and self-esteem of students

Classroom Management	N	Mean	SD	df	t	р
Effective Classroom Management	78	35.09	20.62	108	-2.748	.004
High Self Esteem	32	39.34	7.67			

P < .05.

Results from table 4.1 above shows that effective classroom management (M = 35.09, SD = 20.62) leads to high self-esteem (M = 39.34, SD = 7.67) among students, [t (108) = -2.748, p < .05]. Therefore the hypothesis is supported.

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#### H<sub>2</sub>: Students who have high self-esteem have high academic achievement than students who do not.

Self-Esteem	Ν	Mean	SD	df	t	р
High	60	46.87	15.47	108	276	0.39
Low	50	47.68	15.13			

Table 4.2: Table showing differences in self-esteem and academic achievement of students.

Results from table 4.2 above shows that students with high self-esteem (M = 46.87, SD = 15.47) do not have high academic achievement than students who have low self-esteem (M = 47.68, SD = 15.13), [ $t_{(108)} = -.276$ ,(p = ns)]. This shows that the hypothesis was not supported.

#### H<sub>3</sub>: There is a positive relationship between effective classroom management and academic achievement.

Table 4.3: Table showing the correlation between effective classroom management and academic achievement.

r p		
1. Effective classroom management	.176*	
2. Academic Achievement	.033	

P < .05

From the Table 4.3 above, it is shown that there is a positive correlation relationship between effective classroom management and academic achievement ( $r = .176^*$ , p (.033) < .05). This shows that the hypothesis is supported

#### H<sub>4</sub>: Male students have higher self-esteem than female students.

 Table 4.4. Table showing differences in Mean (M) and Standard Deviation (SD) of self-esteem between male students and female students.

Gender	Ν	Mean	SD	df	t	р
Males	52	36.06	7.48	108	351	0.39
Females	58	36.56	7.75			
P>0.05						

Results from Table 4.4 above shows that male students do not have high self-esteem (M = 36.06, SD = 7.48) than female students (M = 36.56, SD = 7.75), [t (108) = -.351, p = 0.39]. This shows that the hypothesis was not supported.

#### **Discussions:**

The four hypotheses that were tested in the study are discussed below in relation to the studies and theories that were stated above.

Hypothesis one (H<sub>1</sub>) which tested whether effective classroom management skills enhance self-esteem of students was fully supported and this confirms a study conducted by Sandra Ruvuza (2012) which established that effective classroom management strategies enhances self-esteem which in turn increases academic achievement of students. It is also in congruence with Ryckmans' self-enhancement theory which states that individuals (students) are influenced to maintain their self-esteem in an optimistic way. This calls for teachers to encourage students rather than rebuke them in order to enhance their self-esteem and before this can be achieved, we need a better understanding of classroom management skills so that we can effectively employ it in teacher - student daily interactions in the classroom to enhance students' self-esteem. The concept of classroom management has a wider scope and orientation than that which is implied in more traditional and old fashioned terms like "discipline" or "control". It is an umbrella term that

encompasses teachers' effort to oversee the activities of the classroom including students behavior, students interactions and learning (Burden,2000; Evertson & Harris, 1999; Evertson & Weistein,2006; Good & Brophy, 2000; Iverson,2003). It also entails all the things that a teacher must do to foster student involvement and cooperation in classroom activities whilst at the same time, establishing his or her authority in the classroom environment. It can be operationalized as behavioral tendencies that teachers utilize to conduct daily instructional activities. These tendencies reflect the teacher's discipline, communication and instructional styles. The concept spans a very broad range of activities, encompassing such things as arranging the physical setting of the classroom, establishing and maintaining classroom procedures, monitoring students behavior, dealing with deviant behaviors, keeping students accountable for work and conducting lessons that keep students on task (Adeyemo,2012).

Kimberly (2001) stated five characteristics of as classroom as security, open communication, mutual liking, shared goals and connectedness. These important five characteristics are prerequisite to achieve an ideal classroom. In other to achieve the ideal classroom to enhance the smooth delivery of instruction, it is imperative for the teacher to minimize or avoid altogether disruptive behavior by students. Santrock (2004) identified three sources of disruptive behavior by students which are the school environment, the teacher or the student as shaped by the society or environment. The teacher can use his relationship with students to foster their psychological disposition which in can in turn lead to academic success (Eze,2002; Santrock,2004).

Hypothesis two ( $H_2$ ) which sought to find whether students with high self-esteem have high academic achievement than students who do not was not supported and this also is in congruence with the study conducted by Iniama (2004) which recorded no significant relationship between students' self-esteem and academic achievement. This meant that the level of one's self-esteem has nothing to do with their academic achievement. Self-esteem according to Rosenberg (1986) refers to a person's feeling of self-worth. Cooley (1902) postulates that self-esteem is socially determined and is based on the opinion of significant others. A high opinion from significant others will lead to high self-esteem and a low opinion from significant others will likewise lead to low self – esteem. Tobias, Fang and Bang (2008) have through numerous studies brought out a definite connection between self-esteem and social support with reference to four (4) sources of potential support (parents, teachers, classmates and close friends). Adolescents with the lowest level of social support report the lowest self-esteem whereas those receiving the most support hold the self in the highest regard. This was also supported by a study by Sinnes (2006).

Hypothesis three (H<sub>3</sub>) tried to find out if there was a positive correlation relationship between effective classroom management and academic achievement was supported this confirms the studies conducted by Adeyemo (2012) and Seda Yaser (2008) which were stated in the literature review above. Many studies (Edmund & Stough,2001; Ball & Bass,2003; Brouwer & Tomic,2000) conducted have all supported the assertion that effective classroom management increases students' academic achievement. This is also in line with Skinners' reinforcement theory which opines that teachers need to reward students for good academic performance in order to motivate them to give out their best. It can also be linked to Banduras' social learning theory which postulates that people learn from the behavior of others. This positive reinforcement can inspire their colleague students to also aspire for academic excellence. Nonetheless, another study (D'Agostino & Powers,2009) found no relationship between effective classroom management and academic achievement.

Hypothesis four ( $H_4$ ) which tested whether male students have high self-esteem than female students was also not supported and this is in line with studies conducted by Abiam and Odok (2008), Howes (2002) and Sinnes (2006) which found no differences in self-esteem among males and females adolescent but contradicts the study conducted by Naderi, Abdullah, Aizan, Sharir, Kumar, (2009) which showed that there is a difference in self-esteem between males and females (Naderi, Abdullah, Aizan, Sharir, Kumar, 2009; SarAbadaniTafreshi, 2006).

Sex is a biological classification of a person being a male or a female based on his sexual make up whereas gender can be said to be any difference that is based on socio - cultural beliefs that have evolved overtime. The society as a cultural custodian, by its "dos and don'ts" pre-maps gender. Thus, Ukpong and Inaja (2005), emphasized that many children are programmed from the onset to believe that they cannot succeed in certain fields of life or beyond some practical limits. Gender stereotypes are exaggerated generalizations about masculine and feminine attitudes and behaviors that sometimes reflect reality, but often do not, example is the belief that males are active and aggressive whiles females are passive and dependent. Adolescent stage is the stage that the young person

goes through a lot of transition and begins to redefine him/herself in many areas. This is also the stage that there is gender – role intensification; when boys and girls are pressured to adopt more differences in their interest, domain values and activities. It therefore comes as no surprise that some studies (Kawash, 1982; Block & Robins, 1993) have established that males have higher self-esteem than females in early adolescence which is in sharp contradiction with this hypothesis (H<sub>2</sub>). Other studies (Rodriguez-Tome et al,1993) went to assert that these differences in self-esteem in early adolescence seems obvious in such domains such as athletic competition but is less obvious in cognitive abilities (Eccles & Midgley,1991).

### 5. CONCLUSION

The findings of this study shows that effective management of the teaching-learning environment plays a pivotal role in the attainment of established academic goals and objectives. From this study, it can be clearly stated that hypotheses 1 and 3 were supported which shows that we cannot achieve our goal of enhancing education and promoting academic achievement without effective classroom management skills and teachers as well as educators should be at the fore-front of this crusade.

Gender and self-esteem have no bearing or whatsoever on academic achievement as hypotheses 2 and 4 shows. This affirms the saying that "what men can do, women can also do and even better". We need to create equal opportunities for everyone and stop stereotyping so that together, we can contribute our quota to national as well as global development.

# 6. RECOMMENDATIONS

To begin with, the researcher recommends that the government and all stakeholders in the educational sector will initiate a periodic training programme for all teachers, both in government and private institutions so that they will be taken through the latest developments in the scientific research-driven mode of instruction delivery in the teaching-learning environment. Most of the teachers in our institutions have never had any current training aside the one they received during their training as teachers and some completed so many years ago such that what they learnt is in dissonance with modern theories and researches. Most of these teachers still employ the traditional method of instruction delivery where the teacher is the repository of knowledge and the students are passive ignorant listeners who have to imbibe all that the teacher says. Numerous studies (Ghaith & Yaghi,1997; Woolfolk & Hay,1990) have shown that this method of instruction delivery kills students personal initiative and growth. We train students to prepare them for life not just to pass examination so we need to nurture their assertiveness and creativity, thus the need to re-train most of our teachers in system.

The government and all stakeholders in the educational sector also need to put measures in place to make sure students pay their fees on time and put an end to the situation where students are sacked from examination hall during examination period all because they owe school fees. This does not help to get the accurate assessment of students so that teachers will know how students are performing in their subjects. The teachers normally get scanty and inaccurate academic record of their students and this hinders them from accurately evaluating themselves based on their students' performance. Most of these teachers have to wait for the students to take external examinations like West African Secondary School Certificate Examination (WASSCE) during their final years before they can get the true picture but we all know that by that time, it would have been too late.

Future researches can make provision for long-term follow-up which was a shortfall of this study. This will make it possible for the long-term effect of effective classroom management skills on students' self-esteem and academic achievement can be ascertained. Even though this recorded some effect as in hypotheses one (1) and three (3) and no effect as in hypotheses two (2) and four (4), things can be different if there was a follow-up study.

#### REFERENCES

- [1] Adelman, H. S. & Taylor, L. (2002). School counselors and school reforms: New Directions. *professional School Counselling Journal*, 5(4),235-248.
- [2] Adeyemo, S.A. (2012). The relationship between effective classroom management and student academic achievement. *European journal of Educational Studies*, 4(3), 367-381.

- [3] Afful-Broni, A. (2010). The school as a Social Unit: The Ghanaian Perspective. Accra. Smartline Publications.
- [4] Albert, L. (1989). A teacher's guide to cooperative discipline: How to manage your manage and promote *self-esteem*. U.S.A. Circles Pines Press.
- [5] Andersan, L; Everton, C. & Brophy, J. (1979). An experimental study of effective teaching in first-grade reading groups. *Elementary School Journal*, *79*(4), 193-223.
- [6] Alsakar, F.D & Olwens, D. (1999). Stability of Global Self-evaluation in early adolescence: a cohort longitudinal study: *Journal of Research on Adolescence*,(2),123-145.
- [7] Bauman, S. & Del Rio, A. (2006). Preservice teachers responses to bullying scenarios: Comparing physical, verbal and relational bullying. *Journal of Educational Psychology*, 98(1), 23-30.
- [8] Burden, P.R. (2000). *Powerful Classroom Management Strategies: Motivating Students to Learn*. Calfornia. Corwin Press.
- [9] Carter,L. (1992). Assertive Discipline: Positive Behavior Management for Today's Classroom. Santa Monica. Lee Canter & Associates Press
- [10] Cemalcilar, Z., Canbeyli, R., & Sunnar, D. (2003). Learned helplessness, therapy and Personality Traits; An experimental study. *The Journal of Social Psychology*, *143*,65-81.
- [11] Emmer, E, Everton, C. & Andersan, L. (1980). Effective management at the beginning of the school year. *Elementary School Journal*, 80,219-231.
- [12] Laugesen, N., Dugas, M. J. & Bukowski, W. M. (2003). Understanding adolescent worry: The application of a cognitive model. *Journal of Abnormal Child psychology*, 31.55.
- [13] Lloyd, P. & Mayes, A. (1999). Introduction to Psychology: An Integrated Approach. London. Diamond Books Publishers.
- [14] Montagague, M, & Garderen, D. (2003). A Cross-sectional study of mathematics, Achievement estimate skills and academic self-perception in students of varying ability: *Journal of Learning Disabilities*, 36, 437-449.
- [15] U.N.D.P. (2003). Human Development Report. Millenium Development Goals: A contract amongnations to end human poverty. New Delhi. Oxford University Press.
- [16] Wenglinsky, H. (2002, February 13). How schools matter: The link between teacher classroom Practices and Student Academic Performance. *Education Policy Analysis Archives*, 10 (12).