Improving Self-Esteem Levels among Ghanaian Junior High Students Using Designed Activities

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Abstract
The study explored the self-esteem levels of Junior High School students in Ghana. The researchers used designed classroom activities with local sociocultural themes to improve students' self-esteem levels. Also, we examined students' gender difference and association with their self-esteem scores. A total number of 40 students were selected using simple random sampling. The participants were made up of 21 females and 19 males, who were between the ages of 12 and 17 years old. At Phase 1 of the study, all the 40 participants undertook the pre-test assessment. Based on their scores, 11 of them who had low self-esteem scores were selected for both Phase 2 (intervention) and 3 (post-test). By means of a simple random sampling, 6 and 5 students were again assigned into Experimental and Control Groups respectively. Results at Phase 1 showed that there was no significant difference and association between students' gender and self-esteem scores. However, there was a significant difference between the Experimental and Control Groups' self-esteem scores following the intervention phase. Consequently, we recommend that the curricula for basic schools should incorporate self-esteem oriented topics and activities. In addition, future studies should employ a longitudinal approach to study students from the primary level until they reach high school.

Keywords: designed activities, Ghana, junior high school, self esteem, students.

1. Introduction
Over the years, self-esteem has been considered as one of the important and popular psychological concepts among researchers (Balley, 2003; Robins et al., 2010; Roman et al., 2008).

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Self-esteem among children is very crucial as this is seen as a crucial period for self-esteem development (Bleidorn et al., 2016). Several factors have been associated with the development of self-esteem. Atindanbila et al. (2012) and Bleidorn et al. (2016) for example indicated that males consistently reported higher self-esteem than females. Nonetheless, Jain and Dixit (2014) found no association between gender and self-esteem.

Another factor that has been identified as important in influencing self-esteem is age. Notwithstanding the gender, levels of self-esteem were associated with age groups (McMullin, Cairney, 2004). Similar to previous studies, Bleidorn et al. (2016) noted age-related increases and male gender to report higher self-esteem levels across cultures. Apart from these variables, body image, self-efficacy, socioeconomic factors, and academic performances have also been indicated to affect self-esteem (Bittle et al., 2001; Bruce, 2016). According to a study by Fortman (2006), self-esteem correlated with their body image and self-efficacy of females rather than males. Also, Crocker et al. (2002) identified that academic performances are associated with self-esteem while Bhardwaj and Agrwal (2013) noted that subjective social experiences of children, whether good or bad have predispositions of affecting their self-evaluations. According to Leary and Baumeister (2000), self-confidence is attained when children receive social acceptance which can lead to high self-esteem while peer rejection and loneliness lead to poor self-image, self-doubt, and low self-esteem.

Though the role of self-esteem has been noted as an essential concept over the years (Bleidorn et al., 2016; Falk, Heine, 2015), little has been done with regards to the use planned classroom activities as interventions to improve self-esteem in Ghana (Cudjoe, 2017). The purpose of the study is to determine the self-esteem rate of Junior High School students and help improve the self-esteem of those with low self-esteem through designed activities (intervention).

2. Materials and methods
Research Design
An experimental design with a pre-and-post-intervention method was adopted for the study. The pre-intervention test was used to assess participants' levels of self-esteem levels. Following that, those with low self-esteem were identified and re-grouped into Experimental and control Groups for the intervention phase. The post-intervention test was then used to measure the extent to which the self-esteem levels of students changed after they had received the intervention.

Population and Sample
The population for this study comprised Junior High School students in Ghana from the heterogeneous background; different socio-economic backgrounds and academic abilities. The initial sample size for **Phase 1** was made up of 40 students; 52.5 % females and 47.5 % males. This selection had no intended researcher bias for a particular gender as the volunteers had more female representation than males. The ages of participants ranged between 12 and 17 years with a mean age of 14-years-old. The proportion of participants' educational background included 30 % Junior High School Form 1 students, 32.5 % Junior High School Form 2 students, and 37.5 % Junior High School Form 3 students.

Additionally, 55 % of the participants were within the top 10 ranks when compared with their mates. Generally, 45 % of the participants had a good view of their physical appearance, 37.5 % of them were not sure whether they looked good or bad, and 17.5 % reported a poor perception of physical appearance. Overall, the majority (75 %) of all participants at **Phase 1** came from families with a middle socioeconomic class. Notably, participants indicated 37.5 % low, 27.5 % moderate, and 35 % high confidence levels.

Sampling Technique
The simple random sampling method was used in choosing the sample for the study at both Phase 1: Screening Stage and Phase 2: Intervention Stage. The simple random sampling method was adopted to select samples for these two stages because of its adequacy for classroom and pedagogical research (Clark, 2015; Diemer et al., 2015).

Data Collection Instrument
This study made use of a 16-item questionnaire which was made up of three sections (A, B, and C). Section A measured students' demographics such as gender, age, and class. Section B measured factors like previous class ranking, satisfaction with physical appearances, and family's economic status. Section C was made up of adopted items from Rosenberg's Self-Esteem Scale

(Rosenberg, 1965). The Rosenberg's Self-Esteem Scale is a 10-item scale with answers on a 4-point Likert scale, ranging from strongly agree to strongly disagree. It is designed to assess individuals feeling of self-worth and has an internal consistency that ranges from 0.77 to 0 .88 with a content validity of 0.55 (Rosenberg, 1965; Westaway et al., 2015).

Data Collection Procedure
The study was conducted according to the standards of the Declaration of Helsinki (6th revision, 2008), local institutional protocols, and parental permission. Following these, students were briefed on the nature of the research and debriefed afterward.

Phase 1: Pre-intervention
Questionnaires were used to gather data on student's demographics and self-esteem levels. Data were analysed to identify students with low self-esteem. Eleven participants with low scores on self-esteem were separated from the total sample for the next stage.

Phase 2: Intervention
A simple random sampling was again used to assign 6 and 5 students into the Experimental and Control Groups. The Experimental Group was introduced to 3 intervention sessions which lasted between 35 to 45 minutes with a mix of both educational activities and support. The Control Group had reading and mathematics classes during the sessions as a placebo.

An overview of the sessions are as follows:
Session 1 consisted of activities that introduced participants to the purpose of the program, expectations and a discussion of the activities that would be undertaken. It also focused on educating participants on what self-esteem is and its implication.

Session 2 also focused on activities meant for self-reflection like my strength and quality tests, the mirror exercises and other self-description exercises based on their culture.

Session 3 included self-evaluation booster activities like changing negative self-talk exercises, visualization exercises, and listing my wins-exercises with local Ghanaian themes.

Phase 3: Post-intervention
Another set of questionnaires that measured self-esteem levels were administered to the students 3 weeks for a test-retest evaluation after the intervention-placebo sessions.

Data Analysis
Data from Phases 1 and 3 were analysed using requisite statistical tools following data cleaning. Specifically, descriptive statistics (frequencies and percentages), Pearson Chi-Square, and Independent *t*-Test in the Statistical Package for the Social Sciences was used (IBM Corp, 2012).

3. Results
Relationship Between Gender and Self-Esteem
To assess the relationship between gender and self-esteem, Pearson Chi-Square was selected for the analysis. Finding in Table 1 showed no significant associations relationship between gender and self-esteem of students at **Phase 1**, $[\chi^2 (1) = .025, \rho = .873]$.

Table 1. Chi-Square Relationship Between Gender and Self-Esteem

Variables	Gender		Total	χ^2	ρ
	Male	Female			
Low Self-Esteem	5	6	11	.025	.873
High Self-Esteem	14	15	29		
Total	19	21	40		

Gender Differences in Self-Esteem
At **Phase 1**, an analysis was again conducted to test the effect of gender difference in self-esteem. To test this effect, an Independent *t*-Test was selected. Finding showed that there was no significant difference among the mean (standard deviation) of both male and female self-esteem scores in Table 2, $[t (38) = .527, \rho = .602]$.

Table 2. Independent *t*-Test of the Influence of Gender on Self-Esteem

Gender	N	Mean	Std. Deviation	*t*	*df*	*ρ*
Male	19	18.1579	3.70080	.527	38	.602
Female	21	17.5238	3.89383			

Post-Test Self-Esteem Scores among Groups

The Independent *t*-Test was conducted at the end of **Phase 3** to determine the effect of the classroom intervention on test-retest self-esteem scores of participants in Experimental and Control Groups. As summarised in Table 3, there was a significant difference among the mean (standard deviation) of these two groups [*t* (38) = .527, *ρ* = .602].

Table 3. Independent *t*-Test of the Influence of Intervention on Self-Esteem

Groups	N	Mean	Std. Deviation	*t*	*df*	*ρ*
Experimental Group	5	18.8571	1.34519	7.055	9	.000
Control Group	6	14.1000	.10000			

4. Discussion

Results in the study indicated that gender had no statistically significant effect on self-esteem. Additionally, the analysis showed no significant effect of gender differences in performance of participants before the intervention phase. A similar trend was also reported by Jain and Dixit (2014) among Indian youth. They confirmed in their study that gender may not have much effect on self-esteem in recent times. However, this assertion is opposite to findings of researchers like Atindanbila et al. (2012) in Ghana and Bleidon et al. (2016) among several countries. According to Josephs et al. (1992), the gender differences in self-esteem observed by researchers may be attributed to the approach self-esteem is measured considering factors like "culturally mandated, gender-appropriate norms" (p. 391). Furthermore, school environment and socio-cultural perceptions concerning body image may affect the self-esteem evaluation in adolescent girls leading to a possible gender effect on self-esteem (Cribb, Haase, 2016).

The study's finding also suggested that the use of group activities with local cultural themes can help boost students' self-esteem. Group therapy had been reported as effective as opposed to standard care in improving self-esteem (Chen et al., 2016). In a study among selected government schools in Haryana, group assertive training offered to adolescent girls was observed to significantly affect their self-esteem (Sonia et al., 2016). Additionally, Tirlea et al. (2016) suggested group-based, low-dose intervention as effective for enhancing self-esteem in both primary and secondary school-aged participants.

5. Conclusion and Recommendations for Future Research

This goal of the study was to employ locally designed activities to increase the self-esteem levels of students with low self-esteem. Results from the study noted that gender played no significant role in influencing the levels of students' self-esteem among selected participants in Ghana. Also, the results showed a significant difference among the mean (standard deviation) of the Experimental Group and the Control Group. Accordingly, the Experimental Group who were exposed to the intervention had higher self-esteem scores than the Control Group. The study concluded that designed activities which include local cultural themes should be used to assist students to improve their self-esteem.

The researchers suggest the Ghana Education Service should ensure that curricula for students incorporate self-esteem interventions or activities for students. In addition, future studies should also focus on longitudinal studies, beginning from primary schools to determine the extent of their self-esteem.

6. Conflicts of Interest
The authors declare the work has no conflicts of interest.

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