Social self-concept and academic performance of students: Evidence in two Ghanaian Colleges of Education

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Abstract
Social self-concept is an important psychosocial indicator of students’ learning outcomes and academic performance. Hence, this study investigated the influence of social self-concept on academic performance of teacher trainees in Ada and Accra Colleges of Education in Ghana. Descriptive cross-sectional survey design was adopted for this study. A total of 262 teacher trainees, were selected via multi-stage sampling technique for the survey. A pre-tested and contextually prepared structured questionnaire (Cronbach’s alpha reliability coefficient =0.80) was used to conduct the survey. The Statistical Package for Social Sciences (SPSS) version 22 was used to analyse the data quantitatively using frequency count, percentage, Pearson Product Moment correlation analysis and independent samples test. The findings indicate a statistically significant positive relationship between teacher trainees’ social self-concept and their academic performance (p ≤ .05). It is, therefore, recommended that academic counsellors of Accra and Ada Colleges of Education should organise guidance programmes for trainees to equip them with the needed skills to enhance their social self-concept.

Key Words: Social self-concept, psychosocial, academic performance, teacher trainee.

Introduction
Self-concept is a multi-dimensional construct. Self-concept may refer to how one understands himself or herself as an individual endowed with unique or special characteristics with regard to social and academic characteristics. According to Pasher, McDaniel, Rohrer and Bjork (2009), self-concept connotes a sense of how individuals think and build impressions about themselves. Therefore, social self-concept of students focus on how they relate to their parents, peers, teachers, and others. A study by Amonoo (2015) indicate that academic performance of teacher trainees is dwindling year after year which seem to predict that there is a problem. This support the view that students in the various Colleges of Education in Ghana are having challenges regarding their academic performance. This can be as a result of their poor academic and social self-concepts as posited by Sikhwari (2014) who indicated that students with low academic and social self-concepts usually perform low in their academic exercises. There is still issue of low performance among students in Ghana, especially among students in the various Colleges of Education (Yengimoliki, Kalantarkousheh & Malekitabar, 2015; Sikhwari, 2014; Bacon, 2011). Accra and Ada Colleges of Education are no exemption to this phenomenon.

Statement of the problem
Poor social self-concept is predictive of low academic performance of most teacher trainees in Accra and Ada Colleges of Education. Existing research that explored the relationship between self-concept and academic performance treated the phenomenon as a holistic concept, and this mostly focused on basic schools in Ghana (Dramanu & Balarabe, 2013; Mohammed, 2009). Most of the studies focused on school related factors, thereby neglecting the psychological and individual related issues such as self-concept. This ignored potential positive aspects of the interaction between social self-concept and academic performance. This implies that there is
absence of empirical data on the subject matter of, and this creates a knowledge gap which needs to be filled by the current work. However, this study focused on segregating self-concept into one dimension: social self-concept. Empirical literature reports on significant effect of self-concepts on students’ academic performance (Affum-Osei, Adom, Barnie & Solomon, 2014). However, little attention is paid to this phenomenon in Ghana, particularly in the Accra and Ada Colleges of Education. There is therefore a contextual gap that needs to be filled.

**Purpose of the study**
The purpose of this study was to investigate the influence of social self-concept on academic performance of teacher trainees in Ada and Accra Colleges of Education.

**Objective of the study**
This study found out whether there is a relationship between social self-concept and academic performance of teacher trainees in Ada and Accra Colleges of Education.

**Research question**
The following research question guided this study: “What is the relationship between social self-concept and academic performance of teacher trainees in Ada and Accra Colleges of Education?”

**Research hypotheses**
- **H₁**: There is no statistically significant difference between the social self-concept of male and female teacher trainees of Ada and Accra Colleges of Education.
- **H₂**: There is no statistically significant difference between the social self-concept of teacher trainees of Ada and Accra Colleges of Education.

**Significance of the study**
Theoretically, this research would contribute to the on-going debate about social self-concept and academic performance to fill the gap in contemporary literature. The study would provide counsellors and psychologists additional information on self-concept development that could be used in counselling both tutors and trainees.

**Theoretical framework**
This study adopted Self-theory by Rogers (1951) as one of the social psychology theories. Rogers (1951) posits that every individual contains within himself or herself the potentialities for healthy and creative growth. The failure to realise these potentialities is due to the constricting and distorting influences of parental training, education and other social pressures. Rogers suggests that such acceptance may be the strongest factor of change in a person. This means that what is present in a teacher trainee’s environment in one way or the other helps in the formation of his/her social or academic self-concept. In this vein, the ability of the teacher trainees to establish good rapport with their parents, teachers, peers, and role models will help enhance their social self-concept. This is so because, this group of people are in a better position to provide teacher trainees unconditional positive support in the form of mentoring, encouragement, counselling and other such activities that fulfil the needs for positive self-regard in their learning of the various subjects. This will ultimately boost teacher trainees’ ability to develop positive social self-concept that will help in enhancing their learning. On the other hand, if the presence of such significant others in the teacher trainee’s social and academic environments provide negative outcomes in the form of discouragement, the motivation to participate and achieve in the various subjects is likely to be low.
In Figure 1, the dependent variable is trainees’ academic performance, while social self-concept and academic self-concept constitute the independent variables. Gender and college of respondents are treated as controls or covariates. As presented in Figure 1, the argument of the study is that teacher trainees’ social self-concept influences their academic performance significantly. Therefore, if the trainees’ social self-concept is viewed in positive terms or in good shape, they will be in a better position to put in some level of effort in their studies which will strengthen their academic discipline. Students believing that they can perform well in the programme with some level of effort in their academic work will significantly increase their academic performance and total development as a whole in the long run. The study further examined the influence of these control variables on teacher trainees’ social self-concept and academic performance.

Hypothesizing social self-concept as a determinant of academic performance
In the views of Marsh, Byrne and Yeung (1999), the social-self refers to learners’ perception of themselves in a context. This measure of self-concept reflects the extent to which learners deem themselves effective, accepted, respected and appreciated by others in social contexts. For teacher trainees’, it also describes the extent to which they, among other things, believe that they are popular with others, capable of getting along with others, making friends easily and living up to any situation. These factors influence the social self-concept of teacher trainees.

In the context of this study, social self-concept describes how teacher trainees relate with others. This may include how they relate to their parents, peers, teachers and others. It also deals with interpersonal relationship between an individual and the peers, parents, friends, teachers and other people. It therefore, means that social self-concept boarders on the perception of how others see us. In the case of the trainees in the various colleges of education in Ghana, one may argue that learners within these institutions want to be seen and accepted by others as neighbourly, friendly, successful, and so on. This is their social self-concept (Holly & John, 2000).

Generally, learners tend to spend more time with peers than with their parents (Holly & John, 2000). Consequently, satisfaction with peer relationships leads to the development of a positive social self-concept. Social self-concept is a critically important factor in student development and academic performance. This suggests that a student’s interaction with peers, both in the school and at home, provides a context for cognitive development, development of social skills. In the views of Tuz-Zahra, Arif and Yousuf (2010), Laryea (2009) and Tsung-Hau (2008), social self-concept has significant influence on students’ academic performance in schools. Studies have found that high ability students generally get along well with their peers (Cornell, 2006). Gallardo and Barrasa (2016) posited that the extent to which individuals are actively liked, accepted, or preferred by their teachers, parents, and peers has emerged as a core indicator for academic success as well as for their social and emotional well-being, and adjustment. Yengimolki et al. (2015) also affirmed that well-
adjusted students are more serious in their academic work which in the long run enhanced their academic performance significantly.

Gender and institutional type are critical factors in the development of social self-concept. Adewuyi and Akinsola (2013) found in a study in Lagos State University that male undergraduates developed more positive social self-concept than their female counterparts. They echoed that gender has effect on social self-concept and peer influence among undergraduates. In the perspectives of Gerardi (2007), students from different schools usually relate to other people differently since those from a particular school form one homogeneous group.

Methodology
The research design
This is a quantitative research which adopted the descriptive cross-sectional survey design.

Population, sample and sampling techniques
The target population was all the 1,989 teacher trainees in the Ada and Accra Colleges of Education as in the 2015/2016 academic year (Colleges of Education Secretariat [CES], 2015). The accessible population on the other hand was 630 level 200 teacher trainees of the two colleges. A multi-stage sampling approach, using purposive, stratified and proportionate quota sampling techniques was used to sample 265 (approximately 42%) level 200 trainee teachers. In the first stage, the purposive sampling technique was used to select the two colleges of education. In the second stage, purposive sampling was used to the level 200 students because they had stayed in the colleges for at least one year and had written three external examinations by the time of the research. This aided in obtaining the external examination results that were used as proxy for academic performance. Again, it was assumed that they shared similar characteristics in terms of age group cohort, and length of stay in the school. In the third stage, stratified random sampling technique was used to categorise and select the respondents based on gender. In stage 4, proportionate quota sampling technique was used to select 89 males and 54 females from Accra College of Education, and 83 males and 39 females from Ada College of Education randomly. The choice of 42.1% of the population is based on the assertion of Saunders, Lewis and Thornhill (2007) that a sample size of 5 to 30 percent of the accessible population is appropriate for a descriptive survey.

Instrumentation
The data collection techniques for this study were administration of questionnaire and documentary review. Thus, questionnaire and teacher trainees’ end-of-second semester examination scores (extant data extracted from results files for the colleges) were used as data collection tools to gather data for the study. The social self-concept scale developed and used by Laryea (2009) was adapted with a reliability coefficient of 0.81. The instrument was pilot tested on ninety-four (94) students from the Presbyterian College of Education, Akropong-Akwapem in the Eastern Region of Ghana. The response from the pilot test of the questionnaire was subjected to Cronbach’s alpha reliability analysis method via Statistical Package for Social Sciences (SPSS) version 21 which yielded reliability coefficients (r) of 0.80.

Data analysis and presentation
The data were described using descriptive statistics (frequency count and percentage) as well as inferential statistics (Pearson Product Moment correlation analysis, independent samples test or t-test statistics) was computed at a significance level (p-value) of $p \leq 0.05$ (2-tailed) at a Confidence Interval (C.I) of 95% with a margin of error of ± 5. Preliminary assumptions (homogeneity of variance) were verified using Levene’s test (Coakes & Steed, 2003). The data is presented and analysed under two basic themes. These are: demographic information, and relationship between teacher trainees’ social self-concept and their academic performance.
Results

Demographic Information

Table 1: Demographic characteristics of respondents (n = 262)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Institution</th>
<th>Total Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ada CoE</td>
<td>Accra CoE</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>81(68.1)</td>
<td>89(62.2)</td>
<td>170 64.9</td>
</tr>
<tr>
<td>Female</td>
<td>38(31.9)</td>
<td>54(37.8)</td>
<td>92  35.1</td>
</tr>
</tbody>
</table>

Source: Field data (2018). Note: The figures in parentheses are in percentage; CoE stands for College of Education.

It is observed in Table 1 that more male (64.9%) than female (35.1%) teacher trainees were used for the study in both Ada and Accra Colleges of Education. This result suggests that there were more male than female tutors in Colleges of Education in Ghana. This conjecture led to the formulation of two hypotheses that, “There is no statistically significant difference between the social self-concept of male and female teacher trainees of Ada and Accra Colleges of Education.” Secondly, “there is no statistically significant difference between the social self-concept of teacher trainees of Ada and Accra Colleges of Education”. These assumptions were statistically subjected to independent samples test (t-test) at a significance level of p < .05. The t-test result which are shown in Tables 2 and 3 were used to determine significant gender and institutional differences in social self-concept of teacher trainees.

Table 2: Independent samples t-test of gender differences in social self-concept of teacher (n = 262)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Sample (N)</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>170</td>
<td>2.697</td>
<td>0.302</td>
<td>-0.801</td>
<td>260</td>
<td>0.424</td>
</tr>
<tr>
<td>Female</td>
<td>92</td>
<td>2.727</td>
<td>0.254</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Test variables - Dependent variable (social self-concept) and independent variable (gender).
** df (260) - degrees of freedom
*** t-test is significant at the .05 level (2-tailed).

The result in Table 2 shows that there are no statistically significant gender differences in social self-concept of teacher trainees. A comparison of the mean differences indicate a higher mean score for female teacher trainees (M= 2.697, N= 170, SD= 0.302) as compared with their male counterparts (M= 2.727, N= 92, SD= 0.254). The t-test output indicates that the observed difference in the means is statistically not significant; [t (260) = -0.801, p = 0.424, 2-tailed] at a confidence interval (C.I) of 95%. The study reveals no statistically significant gender differences in social self-concept. This finding suggests that gender has no significant effect on constructing social self-concept by teacher trainees in Ada and Accra Colleges of Education. It could be argued that both male and female teacher trainees had marginally the same level of social self-concept. This implies that they had the same opportunity to establish, develop and maintain friendship with their peers in the two colleges of education. The finding validates the views of Kelly and Jordan (2001) who found out that there are no statistically significant gender differences on any of the social self-concept measures. However, the finding contradicts the views of Tuz-Zahra et al. (2010) who found that social self-concept which deals with interpersonal relationship between an individual and the peers, parents, friends, teachers and other people, is perceived to be a factor that is influenced by one’s gender, especially in a patriarchal society like Ghana where certain cultural practices make it difficult for certain category of people to establish interpersonal relationships. Similarly, the finding is inconsistent with that of Adewuyi and Akinsola (2013) who in a study in Lagos State University found that male undergraduates developed more positive social self-concept than their female counterparts. According to Adewuyi and Akinsola (2013), gender has effect on social self-concept and peer influence among undergraduates.
Table 3: Independent samples test of institutional differences in social self-concept of teacher trainees in Ada and Accra Colleges of Education (n = 262)

<table>
<thead>
<tr>
<th>Institution</th>
<th>Sample (N)</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ada CoE</td>
<td>119</td>
<td>2.724</td>
<td>0.256</td>
<td>0.847</td>
<td>260</td>
<td>0.398</td>
</tr>
<tr>
<td>Accra CoE</td>
<td>143</td>
<td>2.694</td>
<td>0.309</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Test variables - Dependent variable (social self-concept) and independent variable (gender).
** df (260) - degrees of freedom
*** t-test is significant at the .05 level (2-tailed).

The data in Table 3 shows no statistically significant difference between social self-concept of teacher trainees in Ada and Accra Colleges of Education [t (260) = 0.847, p = 0.398, 2-tailed] at a confidence interval (C.I) of 95% even though the mean differences indicate a higher mean score for teacher trainees in Ada College of Education (M= 2.724, N= 119, SD= 0.256) as compared with their counterparts in Accra College of Education (M= 2.694, N= 143, SD= 0.309). The finding that one’s college of study has no effect on his/her social self-concept is inconsistent with the submission of Gerardi (2007) that students from different schools usually relate to other people differently since those from a particular school form one homogeneous group.

Relationship between teacher trainees’ social self-concept and their academic performance in Ada and Accra Colleges of Education

Pearson Product Moment correlation analysis was run to establish the relationship between the dependent variable (academic performance) and the independent variable (social self-concept). Similarly, multiple regression test was carried out to determine the influence of social self-concept on academic performance of teacher trainees in Ada and Accra Colleges of Education

Table 4: Pearson product moment correlation analysis of the relationship between teacher trainees’ social self-concept and their academic performance in Ada and Accra Colleges of Education (n = 262)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Correlation coefficient (r)</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social self-concept</td>
<td>2.708</td>
<td>0.286</td>
<td>0.127**</td>
<td>260</td>
<td>0.035</td>
</tr>
<tr>
<td>Academic performance</td>
<td>2.717</td>
<td>0.604</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data (2018)

*Test variables - Dependent variable (academic performance) and independent variable (social self-concept).
** Correlation test is significant at p < 0.05 level (2-tailed).

The result in Table 4 shows a statistically significant positive relationship between teacher trainees’ social self-concept and their academic performance (r = 0.127, p < 0.05). The finding reveals that social self-concept of teacher trainees at the two colleges of education did relate significantly to their academic performance. This signifies that the more students are able to relate with their colleagues, friends, parents and others, the higher they perform well in their academic work. This finding suggests that teacher trainees who have or receive a lot of attention and recognition from classmates, parents, teachers and significant others experience an increase in academic performance. This finding is an indication that teacher trainees’ association with their peers may necessarily lead to their academic performance. The finding is incongruent with the views of Hamachek (1995) who observed that learners whose parents are involved and supportive, and who set reasonable and reachable expectations have positive social self-concepts.
Key finding
The main finding of this study shows that there is a statistically significant positive relationship between teacher trainees’ social self-concept and their academic performance ($p \leq 0.05$). Social self-concept was found to be a statistically significant contributor to academic performance of teacher trainees in the two institutions. However, there was no statistically significant gender differences in social self-concept of teacher trainees in Ada and Accra Colleges of Education ($p > 0.05$).

Conclusion
The evidence gathered from this study indicates that self-concepts of teacher trainees are related to their academic performance positively. This means, teacher trainees ability to develop positive relationship with their peers, teachers, parents and others, and subsequently developing positive feeling about their academic ability help in enhancing their academic performance significantly.

Recommendations
In view of the above findings, the study makes the following recommendations:

i. Academic counsellors of Accra and Ada Colleges of Education should organise guidance programmes for trainees to equip them with the needed skills to enhance their social self-concept.

ii. Tutors in Accra and Ada Colleges of Education and researchers should carry out a similar study, using the mixed-methods sequential exploratory design, to explore the relationship between social self-concept and academic performance among teacher trainees. This will afford teacher trainees the opportunity to provide narratives about their personal experiences. This might be useful in determining precise interpretations about the relationship between social self-concept and academic performance. Including parent and tutors feedback may also help in triangulating the data, thereby adding to existing literature on the phenomenon.

References


Social self-concept and academic performance of students


APPENDIX

QUESTIONNAIRE FOR TEACHER TRAINEES

SECTION A: DEMOGRAPHIC DATA

*Instruction: Please tick [√] as applicable per item.*

1. College/Institution:  Ada College of Education [    ]  Accra College of Education [    ]

2. Sex:  Male [    ]  Female[    ]

SECTION B: SOCIAL SELF-CONCEPT SCALE

*Instruction: Please tick [√] as applicable per the Likert scale items*

Note that one (1) represents the least agreement to the statements while four (4) represents the strongest agreement to the statements.

<table>
<thead>
<tr>
<th>Statements on social self-concept</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Friends always cluster around me</td>
<td></td>
<td></td>
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<tr>
<td>4. I like to stay alone most of the time</td>
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<td>5. I am born a natural leader.</td>
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<tr>
<td>6. Friends are always seeking my opinion in every issue</td>
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</tr>
<tr>
<td>7. I like to stay around people most of the time</td>
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<tr>
<td>8. I feel sad when I have no one to talk to</td>
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<tr>
<td>9. I think I am useful to my peers</td>
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<tr>
<td>10. I share a lot of activities with my peers</td>
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</tr>
<tr>
<td>11. I make friends easily with my colleagues</td>
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</tr>
<tr>
<td>12. I don’t make friends easily</td>
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<td></td>
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<tr>
<td>13. I never seem to have much in common with classmates</td>
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<tr>
<td>14. My peers understand me</td>
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<tr>
<td>15. I get a lot of attention from my classmates</td>
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<tr>
<td>16. No matter how hard I try some people just don’t like me</td>
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</tr>
</tbody>
</table>

Authors

Juliana Dontoh  is the originator of topic; writing of the introduction and performed data collection.

Raymond Adda Bakete reviewed the literature, performed data analysis and discussed findings of the study.

Pearl Adiza Babah performed writing of the conclusion, recommendations, references and put the article together.