Effect of Instruction in Emotional Intelligence Skills on Locus of Control and Academic Self –Efficacy among Junior Secondary School Students in Niger State, Nigeria

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ABSTRACT

This study investigated the effect of instruction in emotional intelligence Skills on locus of control and academic self-efficacy among junior secondary school students in Niger state, Nigeria. This study employed a quasi-experimental, non-equivalent control group, pre-test – post-test design. The population of this study was 105,034 secondary school students out of which 40 students were purposively sampled and used for the study. The instrument used for data collection were locus of control scale(LOCS) and Academic Self Efficacy Scales (ASES).Data were analysed using mean, standard deviation and t-test. The findings reveals that, Emotional intelligence skills was effective in moderating locus of control (t=23.98, p=.000) and improve academic self-efficacy (t=22.88, p=.000) of secondary school students. And there was no gender difference in the effect of emotional intelligence skills on locus of control (t=1.02, p=.064) and academic self-efficacy (t=3.41, p=.003) of respondents. It was recommended that School Principals, counsellors, Psychologist and Subject teachers should be exposed to training in Emotional intelligence skills such as emotional self-awareness, self-management, social- awareness and relationship management in re-addressing students with academic problems.

Introduction

Achievement is described to be the outcome of instruction. It is the end product of a learning experience. Attaining a high level of academic Achievement is what every parent or guardian as well as teacher wishes for their children, wards and students (Ogundokun and Adeyemo , 2010). A person's "locus" (Latin for "place" or "location") is conceptualized as either internal (the person believe they can control their life) or external (meaning they believe that their decisions and life are controlled by environmental factors which they cannot influence)

Individual with a high internal locus of control believes that event in their life derive primarily from their own actions; for example, if a person with an internal locus of control does not perform as well as they wanted to on a test, they would blame it on lack of preparedness on their part. If they perform well on a test , they would attribute this to ability to study. In the test performance example, if a person with a high external locus of control dose poorly on a test, they might attribute this to the difficulty of the test question. If they performed well on a test, they might think the teacher was lenient or that they were lucky.

In order words, individual who attribute positive consequence to hard and planning would also believe that they are masters of their own destiny. They are more likely to be inner directed and take responsibility for events in their lives (Berzeger, 2011). Individual with an external locus of control are those who believe that fate, luck, chance and other people's action are responsible for events that take place in their lives .These individual do not seem to perceive any relationship between the outcome of their actions and what they have done but views luck, fate or some powerful others as responsible. Rotter (1990) observed that perceived locus of control relates to ones perception of powers and autonomy to function, achievement drive, social involvement and competence. According to Berzeger (2011) individuals' success or failure history exert influence on the individuals' causal attributions in achievement situation. Thus individual who experience success in their academic endeavours on a regular basis develop expectations for continued success. On the other hand, individuals who have consistently experience failure may be external in their locus of control as they usually attribute their failures to events beyond their control. This leads to low expectancy for success in problem solving situation. Thus, results to frustration, high drop-out rates and inability of students to gain admission into tertiary institutions. In spite of numerous efforts made by researchers, educators and policy makers to tackle this problem, academic performance of students is still a task that needs to be improved, but students may also take emotional intelligence training to excel in school. Goleman (1995) outlines four main emotional intelligence constructs. That is: self-awareness is the ability to read one's emotions and recognize their impact while using gut feelings to guide decisions; Self-management which involves controlling one's emotions and impulses and adapting to changing circumstances; social awareness which includes the ability to sense, understand, and react to other's

emotions while comprehending social networks; and relationship management which entails the ability to inspire, influence, and develop others while managing conflict. Emotional Intelligence Skills are affective skills that are used in the competencies of interpersonal communication, personal leadership, self management and intrapersonal development (Vela, as cited in Mayer and Salovey,2003) Emotional intelligence is seen as the ability to perceive emotion, integrate emotion to facilitate thought, understand emotions, and to regulate emotions to promote personal growth (Mayer &Salovey, 2003). Emotional Intelligence could be seen as a special abilities that are helpful in sensing, feeling, knowing and judging emotions in mutual aid with one's thinking process for behaving in the most desirable and appropriate fashion, thus, fostering student Self- efficacy belief in an academic endeavour. Self-efficacy belief was found to influence task choice, effort, persistence, resilience, and achievement (Bandura, 1997).

Academic self-efficacy refers to individuals' convictions that they can successfully perform given academic tasks at designated levels (Bandura, 1997). Academic self-efficacy is defined as students' belief in their abilities to activate and regulate motivation and cognitive resources needed to attain a desired educational goal (Bandura, 1995). Academic self-efficacy is defined and measured within the context of a specific behavior and situation, i.e., domain specific, rather than general traits or global self-concepts (Zimmerman & Schunk , 2003).

Therefore, the problem of this research was to investigate the effect of instruction in Emotional Intelligence skills on locus of control and Academic Self-Efficacy among secondary school students in Niger State, Nigeria.

Research Questions
The following research questions guided the study:
1. What are the differences between pre-test and post-test scores on locus of control of secondary school students exposed to instruction in Emotional Intelligence skills?
2. What are the differences in locus of control mean scores of male and female students exposed to treatment?
3. What are the differences between pre-test and post-test scores on Academic Self Efficacy of secondary school students exposed to instruction in Emotional Intelligence skills?
4. What are the differences in Academic Self Efficacy mean scores of male and female students exposed to treatment?

Hypotheses
The following null hypotheses guided the study:
1. There is no significant difference between pre-test and post-test scores on locus of secondary school students exposed to instruction in Emotional Intelligence skills.
2. There is no significant difference in locus of mean scores of male and female students exposed treatment.
3. There is no significant difference between pre-test and post-test scores on Academic Self Efficacy of secondary school students exposed to instruction in Emotional Intelligence skills.
4. There is no significant difference in Academic Self Efficacy mean scores of male and female students exposed treatment.

Methodology
The research was carried out using quasi-experimental design; Pre-test-Post-test control group. The quasi-experimental design involves the manipulation of one or more independent variables, but there was no random assignment of subjects to conditions (Ali, 2010. The population of the study involved 105,034 students from 40 junior secondary school students around the eight educational zones in Niger State (Post primary schools Management Board, 2014). The researchers use purposively sampling technique for selection after identification; the subjects were sub-divided into two groups namely, 20 students in experimental group, and 20 in the control groups respectively.

The Academic Self Efficacy Scale (ASES) prepared specifically for senior secondary school students, with eighteen items was developed and used to assess students' academic self-efficacy. The instrument items were developed with a guide from: Guide for constructing self-efficacy scale (Bandura, 1997) the Items in Academic Self Efficacy Scale were measured on a 5 point Likert scale; the students were expected to indicate whether they strongly agreed (SA), agreed (A), not sure (NS), disagreed (DA), or strongly disagreed (SD) to statements on the scale. The face validity of the Academic Self-efficacy Scale (ASES) was established by the three experts in the Educational Psychology and Counselling Department, Faculty of Education, Ahmadu Bello University, Zaria. To establish the reliability of the data collection, the researchers analysed the data collected from the pilot test result using Cronbach's alpha with reliability coefficient of 0.93 using SPSS v20 Statistical package was established.

Locus of control scale (LOCS).The locus was designed to provide data relating to students locus causality-whether they are internal or external in their attribute of learning outcomes. In developing this scale, Rotter's Locus of Control Scale (Rotter, 1990) was reviewed and relevant items adapted from the scale to suit the purpose of this study. Every item generated was positively cued to express internal locus of control and negatively cued

to express external control. The instrument is a four point rating scale of Strongly Agree (SA=4), Agree (A=3) Disagree (D=2) and Strongly Disagree (SD=1). Negatively state items were revered scored.

The scale was subjected to peer - review. It was given to specialist in Educational Psychology, special Education and Measurement and Evaluation. Their comments helped to improve on the items of the scale. The scale were also trial tested using primary five pupils with visual impairment in a special education school in suleja academy outside the study area, Niger State, Nigeria The data obtained through the trial testing was used in determining the internal consistency reliability of the instrument. An internal consistency reliability estimate obtained through the cronbach alpha method is 0.79. A test retest reliability to determine the stability of the instrument over time was conducted. In other to achieve this, second administration of LOCS was done after two weeks and the scores obtained from both administrations were correlated using person correlation formula. This yielded a test retest reliability estimate of 0.82.

Treatment procedure;

Instruction in emotional intelligence skills were done through the following processes; self-awareness, self-motivation, self-regulation, empathy, and handles relationships or adeptness in relationships for those in experimental groups. While, those in Control groups, were only expose to the conventional normal class room teaching. The training sessions of the groups took place during the normal school hours and lasted for the period of six weeks where each session lasted 30 minutes twice a week. Academic self-efficacy scale (ASES) and locus of control scale (LOCS) were distributed and retrieved from the students before and after treatment. The researcher appreciates the effort of School Authorities and students for the success recorded throughout the programme and informed them that these marked the end of the programme. Mean and standard-deviation and T-tests were used for testing the null hypotheses at: 0.05, level of significance.

Results

Table 1. Pre-test and Post-test mean scores and SD of the Experimental group.

EXPERIMENTAL GROUP	N	Mean	Std. Deviation
Pre-test	20	24.80	2.50
Post-test	20	46.35	3.14

The result in Table 1.indicate the secondary school students exposed to emotional intelligence skills obtained mean score of 24.80 in the pre- test and had the mean score of 46.35 in the post-test, this implies training on emotional intelligence had significant influenced on those exposed to treatment. This is because the mean gain score of the pre-test-post-test was 21.55

Table 2. Mean scores and SD of male and female students in the Experimental group.

Gender	N	Mean	Std. Deviation
Male	10	25.85	2.24
Female	10	24.75	2.41

From Table 2 above, it can be observed that the male secondary school students had a mean score of 25.85with standard deviation 2.24, whereas female students had a mean score of 24.75with standard deviation 2.41.Their mean gain differences was 1.10, this implies that no significant difference exist among those exposed to emotional intelligence skills as measured by locus of control Scale

Table 3. Pre-test and Post-test mean scores and SD of the Experimental group.

EXPERIMENTAL GROUP	N	Mean	Std. Deviation
Pre-test	20	26.45	2.29
Post-test	20	46.35	3..14

The result in Table 3.indicate the secondary school students exposed to emotional intelligence skills obtained mean score of 26.45 in the pre- test and had the mean score of 46.35 in the post-test, this implies training on emotional intelligence had significant influenced on those exposed to treatment. This is because the mean gain score of the pre-test-post-test was 22.85

Table 4. Mean scores and SD of male and female students in the Experimental group.

Gender	N	Mean	Std. Deviation
Male	10	27.85	1.79
Female	10	25.05	1.87

From Table 4 above, it can be observed that the male secondary school students had a mean score of 27.85with standard deviation 1.79, whereas female students had a mean score of 25.05with standard deviation

1.87.Their mean gain differences was 2.80, this implies that no significant difference exist among those exposed to emotional intelligence skills as measured by Academic Self-efficacy Scale

Table 5. t-test analysis of difference between pre-test and post-test scores of locus of control of students exposed to Treatment

Variables	N	Mean	SD	Df	t-cal	P (sig)
Pre-test	20	24.80	2.80	38	23.98	.000
Post-test	20	46.35	3.14			

Significant at P<0.05

Table 5 above, reveals that (t= 23.98, P= .000). Those exposed to Emotional Intelligence skills recorded greater improvement on locus of control than those in control groups. As a result of this, the null hypothesis which states that: There is no significant difference between pre-test and post-test scores on locus of control of secondary school students exposed to Emotional Intelligence skills, is hereby Rejected. This is in favour of treatment group.

Table6. T-test analysis between male and female respondents in the Experimental group

Gender	N	Mean	SD	Df	t-cal	P (sig)
Male	10	25.85	2.23	38	1.02	.064
Female	10	24.75	2.41			

Significant at P<0.05

Details from Table 6 above, showed that (t= 1.02, P= .064). This means that there is no significant difference between male and female secondary school students who were exposed to emotional intelligence. Therefore, the hypothesis which says there is no significant difference in locus of control scores of male and female students exposed treatment is therefore retained

Table 7. T-test analysis of difference between pre-test and post-test scores of Academic Self Efficacy of students exposed to Treatment

Variables	N	Mean	SD	Df	t-cal	P (sig)
Pre-test	20	26.45	2.29	59	22.88	.000
Post-test	20	46.35	3.14			

Significant at P<0.05

Table 7 above, reveals that (t= 22.88, P= .000). Those exposed to Emotional Intelligence skills recorded greater improvement on academic self-efficacy than those in control group. As a result of this, the null hypothesis which states that: There is no significant difference between pre-test and post-test scores on Academic Self Efficacy of secondary school students exposed to Emotional Intelligence skills, is hereby Rejected. This is in favour of treatment group.

Table8. T-test analysis between male and female respondents in the Experimental group

Gender	N	Mean	SD	Df	t-cal	P (sig)
Male	20	27.85	1.80	38	3.41	.003
Female	20	25.05	1.88			

Significant at P<0.05

Details from Table 8 above, showed that (t= 3.41, P= .003). This means that there is no significant difference between male and female secondary school students who were exposed to emotional intelligence skills. Therefore, the hypothesis which says there is no significant difference in Academic Self Efficacy scores of male and female students exposed treatment is therefore retained.

Discussion

The findings of this study revealed that Emotional intelligence skills was effective in moderating students locus of control and improving academic self-efficacy of secondary school students as can be observed in the difference between Pre-test and Post-test. The difference is in favour of Post-test. This finding is similar with previous work of Aremu and Moyosola (2012); Ahmed and Elmasri (2012) they conducted a study on effects of self-awareness education on self-efficacy and socio-economy status of Nurses in a psychiatry clinic. With a similar result with the findings of the current study and it was concluded that self-awareness training had a positive effects on the development of self-efficacy.

Similarly, Barzegar (2011) found that, learning styles and gender were no correlated. None of the learning styles was associated positively with academic success. It was found that no significant relationship existed between Rotter's measure and academic achievement measured. This seems to serve as a reminder that Rotter'sgeneral measure of locus of control is indeed more general and less specific as seen in this instance regarding the area of academic achievement. This was precisely the reason why Trice's specific measure of academic locus of control was included in the study to help illustrate a higher potential of finding a significant correlation between the locus of control construct and academic achievement

Duval and Silvia (2002) were of the view that success and failure attribution are moderated by self-awareness and by ability to improve. When self-focus is high success is attributed internally; failure is attributed internally when people improve; failure is attributed externally when people cannot improve and these attributions affect state of self-esteem and by implication self-awareness affects academic self-efficacy. Self-management skills have been successfully used for a variety of emotional and behavioural problems; self-management during their periods of study in the universities improves students' creative abilities and academic success. Self-management practices have potential mediation effect on self-efficacy and performance (Yu, 2013).

This finding has been confirmed across a number of experimental and correlational studies involving students of different ages (Bandura, 1997; Pintrich & Schunk, 2002). Also, in a correlational study conducted by Linnenbrink and Pintrich (2002), It was found that self- efficacy is positively related to student cognitive engagement and their use of self- regulatory strategies as well as general achievement as indexed by grades (Pintrich, 2000b; Pintrich & De- Groot, 1990; Wolters, Yu, & Pintrich, 1996). Lastly, further evidence exists in the research literature that confirms Schunk's hypothesis that students who have positive self-efficacy beliefs are more likely to choose to continue to take more difficult courses over the course of schooling. Students' involvement and participation in school depend in part on how much the school environment contributes to their perceptions of autonomy and relatedness, which in turn influence self-efficacy and academic achievement. Although parents and teachers contribute to feeling of autonomy and relatedness, peers become highly significant during adolescence. The peer group context enhances or diminishes students' feelings of belonging and affiliation (Hymel, Comfort, Schonert-Reichl, & McDougall, 1996).

The findings also revealed that there was no gender difference in the effect of emotional intelligence skills training on academic self-efficacy of respondents; hence the training had similar effect for both male and female. The findings of this study was in line with the findings of Festus (2012) where the result of the study indicated that there was a significant low positive relationship between the emotional intelligence of SS2 male students, SS2 female students, urban school students, and rural school students, and their academic achievement in mathematics. It was therefore concluded that apart from cognitive factors, emotional intelligence of students also affects their academic achievement in mathematics. Moreover, the work of Parveen, et al. (2012), revealed that the results of previous two classes of the sample subjects were taken as their academic achievement. The analysis of the data showed that there was no significant difference between male and female adolescent students on composite score of their emotional intelligence. It has also been found that male and female adolescents do not differ significantly on academic achievement Majzubr,

Conversely, Batainehm, Ishakn and Rahman (2010) also found a significant positive correlation relationship was found between internal locus of control and academic achievement. Regarding gender, the study found a slight gender difference, with males being slightly more internal and external than females. However, the study does support the hypothesis and the findings of past research evidence for a positive correlation relationship between locus of control and academic achievement in first year university students.

Conclusion
The findings reveals that Emotional intelligence skills had effect on Academic self-efficacy of the respondents in favour of the experimental group , Emotional intelligence skills' training was effective in moderating locus of control and improve academic self-efficacy of secondary school students as can be observed in the difference between Pre-test and Post-test . And there was no gender difference in the effect of emotional intelligence skills training on locus of control and academic self-efficacy of respondents.

Recommendation
From the findings and conclusion of this study, the following recommendations are hereby made:
1. School Principals, counsellors, Psychologist and Subject teachers should be exposed to Emotional intelligence skills (emotional self-awareness, self- management, social awareness and relationship management) in re-addressing students with positive locus of control and academic competent.
2. Emotional intelligence skills should be inculcated into the school curriculum so as to develop in positive locus of control and students competent or efficacy in their academic endeavour.
3. Seminars, workshops and symposium should be organised to train teachers on emotional intelligence skills to solve students' locus of control and academic problems in schools.

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