

ROLE OF SELF- CONCEPT AND GENDER IN INTELLECTUAL ACHIEVEMENT RESPONSIBILITY

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Abstract

This study investigated the role of self-concept and gender on intellectual achievement responsibility. 164 senior secondary school students (SSII), 87 girls and 77boys with an average age of 16 years participated in the study. Self-Description Questionnaire short version SDQII-S by Marsh (1990) was used to measure self- concept, while the intellectual achievement responsibility questionnaire (IAR) Crandall et.al.,1965 which was adapted in Nigeria by Eyo (2005) was used to measure intellectual achievement responsibility. ANOVA statistics was used to test the hypothesis that there will be no significant self-concept and gender difference in Intellectual achievement responsibility. The results indicated that those with high self-concept scored higher in their intellectual achievement responsibility compared to those with low self-concept ($F=4.95$, $P=<.05$). Gender was not found to be significant. Discussion highlighted the necessity of encouraging self-concept enhancement scheme in school and families and the need to understand school children's intellectual achievement responsibility.

Key words: *Self-concept, Gender, Intellectual achievement, Secondary school*

INTRODUCTION

Human development and advancement is one of the main targets of educational programs globally. Many psychological variables had been indicated as factors that influence individual dispositions in different life events and school children's intellectual achievement responsibility is one of the psychological variables that is vital in determining success or failure in school works (Wong 1995). Barnett and Kaser (1977) found that there is a relationship between a child's assumption of responsibility for intellectual academic successes and failures. They stated that the participants with low total intellectual responsibility showed significantly poorer scores on the intelligence and achievement indices than those with high total intellectual responsibility. As stated by Eyo (2005), understanding school pupil's level of self-responsibility and attribution orientations could be a powerful basis for initiating or maintaining related activities such as teaching or counseling and psychotherapy. Harter (1976) indicated that intellectual achievement mastery develops feelings of efficacy because children see themselves as responsible for their success. Also pleasure in mastering a task is greater when the subject accept responsibility for success. Since understanding school children's internal intellectual achievement responsibility correlates positively with other desirable educational out comes, Eyo (2005) it becomes vital to investigate such variables that could influence intellectual achievement responsibility. This knowledge would help in improving and designing programs targeted at enhancing intellectual achievement responsibility of students, also most of the works done in this area was done outside Nigeria, this work will therefore add to literature in this area of study in Nigeria.

Statement of problem

Intellectual achievement responsibility has an interesting relationship with most educational outcomes, therefore possible factors that can influence it is of importance to researchers. The present study proposes that self-concept high or low and gender may have significant influence on intellectual achievement responsibility. These questions then come to mind:

1. Will self-concept high or low have a role in the intellectual achievement responsibility of the participants
2. Will gender boy or girl have a role in the intellectual achievement responsibility of the participants.

According to Shavelson, Hubner and Stanton (1976) Self-concept is the perception that are formed from experiences and relationships with the environment where significant people (parent, teachers, and other caregivers) play an important role. They stated that self-concept is a multifaceted construct, which cover all aspect of life. Marsh (1990) demonstrated this in his self-description questionnaire, which measured self-concepts and has subscales that cover all aspects of life, academics included. As described by Marsh (2005) the need to think and feel positively about oneself, and the likely benefits of these positive cognitions on choice, planning and subsequent accomplishments transcend traditional disciplinary barriers.

Eyo (2005) noted the importance of self-concept in educational setting and other variety of behaviors. Friend and Neale (1972) found in their study that elementary school children with low self-concept performed poorly in school activities and that those with low internal attribution performed equally poorly in school activities.

In a related empirical study with secondary school pupils Savage, Steams, Friedman (2002) showed that high self-concept is positively related to high positive academic outcome and internal attribution of outcome. Others that reported high self-concept's positive relation with high internal attribution of outcome using school pupil as their participants include, (Nicholls, 1978; Gordon, 1977; Berberian, 1976; Kanoy, 1980; Flynn 1992 and Thongpukdee, 2003).

The present study would investigate whether self-concept high or low' would influence intellectual achievement responsibility of the students. According to Attribution theory by Heider (1958), which explores the causes that individual attribute to various events when subjects perform challenging task in a domain which they perceived they will perform poorly they attribute their difficulties to inability, develop a sense of hopelessness with regard to their inability to perform in the domain in question and perform poorly .. Generally, the model proposes that when individuals' expectations are met they attribute their performance to stable and internal causes, such as ability (high self-concept), but when individual's expectations are not met, they attribute their performance to unstable causes such as luck or others. People that have higher self-concept are expected to attribute events to self (internal).

Gender in research works is viewed as the influence being male or female has on a particular variable or the influence that different culture orientation place on the different sex has on a particular variable of interest. It is very important therefore to ascertain if there is gender difference in the internal intellectual achievement responsibility of school children. Such result will help educationists and psychologists alike to know the best way to handle problem related to intellectual achievement responsibility. Deaux, (1976) expansion of attribution theory may be used to model this assumption. Deaux states that gender difference in expectations and attributions arise primarily from stereotypes about tasks. This is because girls generally have low expectation for success when competing male tasks. Social learning theory of Albert Bandura also stated that people learn through observation and modeling therefore depending of the cultural expectation of boys and girls, they can model any attribute.

Kanoy (1980) found no significant gender difference in the intellectual achievement responsibility of the school children studied. Also Barnett and Kaiser (1977) found in their study that girls did not differ significantly from boys in their intellectual achievement responsibility. Berberian (1976) found a contrary result. In her study boys were found to have significant higher internal intellectual achievement responsibility than girls.

The researcher is aware that huge sum of money are invested annually to upgrade the quality of education in our nation, for the purposes of renovation of schools physical structures, employment of capable human resources, and acquiring of sophisticated instructional materials for teaching. Yet the quality of education and learning in our nation is still highly disputable. Since higher internal intellectual responsibility is positively correlated with positive academic outcomes; the factors that may influence it should be identified.

Hypotheses

1. There will be no statistical significant difference between those with high self-concept and those with low self-concept in the intellectual achievement responsibility.
2. There will be no statistical significant gender difference between boys and girls in the intellectual achievement responsibility

Method

Participants:

One hundred and sixty four (164) Senior Secondary School Students participated in this study. They included 77 boys and 87 girls. These participants were randomly selected from two Co- Secondary Schools in Nsukka Educational Zone using simple random sampling (Table of random sampling) described by (Shaugnessy, Zechmeister, . and Zechmeister, 2000). The average age of the participants was 16 years.

Instruments:

Short version of Self- Description questionnaire II, (SDQII-S) was used to measure self-concept while intellectual achievement responsibility questionnaire, IAR was used to measure intellectual achievement responsibility.

SDQII-s was developed by Marsh (1990) to measure adolescent's multidimensional self-concept. It contained 51 items with eleven subscales which include, Physical Abilities, Honesty, Self-esteem, General school, Verbal, Math etc. It is in 6 point likert format ranging from 1-false to 6 true and 20 out of the 51 items are negatively worded and must be reversed during scoring so that all varied along the same one scale. Marsh Ellis, Parada, Richards, and Heubeck (2005) found the reliability to test-retest, to be good at $r = .90$, confirmatory factor analysis (CFA) showed SDQII-s have convergent validity for same subscale factor $r = .38$ to $.841$ and discriminate validity as $r = .03$ to $.20$.

However, Nwafor (2007) found an alpha of $.75$, split-half of $.82$ and a concurrent validity with Ezeilo (1988) semantic differential scale of $r = .52$, $p < .001$ for the Nigerian sample.

IAR: This was developed by Crandall Katkovssky, and Crandall (1965) and adopted in Nigeria by Eyo (2005). Eyo found the test-retest reliability of IAR to be significant at $r = .42$, $p < .001$. IAR has concurrent validity of $r = .64$ when correlated with grade point average (G.P.A). It has 34 items and was so

constructed that in addition to a total one internal responsibility scores, separate sub scores could be obtained for beliefs in internal responsibility for success and for failures.

Procedure:

Self-concept questionnaire and IAR were administered together to the participants immediately after their break time. For each selected group the instructions were read and the researcher asked if they had any questions in the absent of question they were ask to respond to the questionnaire. In all hundred and seventy copies of the questionnaire were administered but six copies were discarded because they were not properly filled. The remaining 164 were scored and was used for data analysis. Design/Statistics: Ex-Post facto design was used in this research. The parametric statistic ANOVA was used to analyze the data because the dependent variable is in an interval scale.

RESULTS

Table 1: Table of mean role of self-concept and gender in internal intellectual achievement responsibility

Self-concept	Mean score IAR	Std. Dev. IAR	Number
High	27.26	2.46	89
Low	25.23	8.20	75
Total			164
Gender			
Boys	26.65	7.83	77
Girls	26.05	3.41	87
Total			164

Table 2 ANOVA summary table for role of self-concept and gender in IAR

Source	Types III sum of square	df	Mean square	F	sig
A self-concept	168.97	1	168.97	4.95	*
B Gender	26.18	1	26.18	.760	Ns
A X B	23.51	1	23.51	.688	Ns
Error	5464.09	160	34.15		
Total	119368.00	164			

P<.05

Self-concept has a significant main effect on internal intellectual achievement responsibility as shown in table 2; F = 4.948; P<. 05. Table I shows that the mean score for participants with high self-concept was higher (mean(x) = 27.26; SD = 2.46) than that for low self-concept (mean(x) =25.23; SD = 8.20). This implies that participants with high self-concept had higher intellectual achievement responsibility.

Gender had no significant main effect on intellectual achievement responsibility.

DISCUSSION

The results of this study showed that there was main effect of self-concept in internal intellectual achievement responsibility. Those with high self-concept significantly have higher internal intellectual achievement responsibility than those with low self-concept. This result is consistent with the work of Savage, et al (2000) who found that school children with high self-concept significantly have higher internal attribution than those with low self-concept. It is also in agreement with the work of Friend and Neale (1972) who found that grade school children with low self-concept made low internal attribution for failure and external attribution for success. It is further consistent with the studies of several researchers (Nichols, 1978; Gordon, 1977; Berberian, 1976; Flynn 1992, and Thongpukdee 2003), all found that high self-concept significantly correlate with high internal attribution to success than low self-concept.

This is also in line with Heider (1958) attribution theory which explores the causes that individual attribute to various events. As proposed by the theory, when subjects perform challenging task in a domain which they perceived they will perform poorly they attribute their difficulties to inability, develop a sense of hopelessness with regard to their inability to perform in the domain in question and perform poorly. It further states that causes were said to be either internal as with ability and effort or external as with inability to perform. Generally, the model proposes that when individuals' expectations are met they attribute their performance to stable and internal causes, such as ability (high self-concept), but when individual's expectations are not met, they attribute their performance to unstable causes such as luck. People that have higher self-concept is expected to attribute events to self (internal). Attribution theory predicts they will also have higher intellectual achievement responsibility as was shown by the research result.

The results also showed that gender has no significant main effect on intellectual achievement responsibility. This suggests that being a boy or girl, on its own may not be important in internal intellectual achievement responsibility. This results in consistent with the work of Kanoy (1980) who found no significant gender difference in the intellectual achievement responsibility among school children. It also agrees with the study by Barnett and Kaiser (1977) that girls did not differ significantly from boys in their intellectual achievement responsibility. The result however, did not agree with the work of Berberian (1976) who found that boys have significant higher intellectual achievement responsibility than girls.

The reasons for this discrepancy are found in Deaux, (1976) expansion of attribution theory. Deaux states that gender difference in expectations and attributions (IAR) arise primarily from stereotypes about tasks. This is because girls generally have low expectation for success when competing male tasks. Also Social learning theory states that people learn through observation and modeling, therefore depending of the cultural expectation of boys and girls, they can model any attribute. Therefore if both genders receive the information about intellectual achievement responsibility as the researcher subject from the same school (co-educational system), gaps in the intellectual achievement may likely not be significant.

Implications

The result of the first hypothesis is implicated in counseling and therapeutic setting. When a client is having academics difficulties, it becomes important that if intellectual achievement responsibility is involved, the client's self-concept should be worked on to enhance the individual to take responsibility of the events surrounding his/her performance.

The implications of the second hypothesis result is that gender bias language and stereotype often attached to some school task should be changed to non sexes language. If both gender are encourage to

compete equally in academic fields, there will be better academic outcome. Finally, self-enhancement program, must be encouraged in schools, this will make school children irrespective of their gender to have confident and trust in their own ability and consequently develop high intellectual achievement responsibility. As mentioned earlier high internal intellectual achievement responsibility have other positive academic benefits, more importantly those with high IAR also have good grades.

Limitation

The main limitation of the study is that IAR is viewed as a single variable without considering the effect of internal positive and negative scores. Therefore further studies can explore the role of the independent variables on the internal positive and negative intellectual achievement responsibility respectively.

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