Belief System, Peer Pressure and Self-monitoring Skills as Determinant of Academic Achievement among Senior Secondary School Students in Ogun State

[1]Olawole, Ayodeji Olorunfemi (Ph.D) & [2]Oluwatoyin Olugbemi (Ph.D)
[1]Department of Guidance and Counselling,
[1]Faculty of Education, Federal University, Oye Ekiti, Ekiti State
[2]Department of Guidance and Counselling,
[2]Faculty of Education, Olabisi Onabanjo University, Ago-Iwoye,Ogun state

Abstract
This study examined the contributions of belief system, peer pressure, and self-monitoring skills to academic achievement of senior secondary school students. A descriptive survey research design was adopted for the study. A sample size of 1,800 was selected through the stratified random sampling technique. Four research instruments was used for this study which include: Belief System Awareness Questionnaire (BSAQ, Findings revealed that peer pressure and self-monitoring skills Peer Pressure Scale (PPS, Revised Self-Monitoring Scale (RSMS) and Measure of Academic Achievement (MAA). All the instruments were used for data collection and were analyzed using descriptive statistics at the 0.05 level of significance. Findings revealed that peer pressure and self-monitoring skills significantly relate with academic achievement of students from senior secondary schools, that belief system, peer pressure, and self-monitoring skills significantly contributed to academic achievement of students in senior secondary schools and that self-monitoring skills and peer pressure were significant predictors of academic achievement of the adolescent students, but belief system was not a significant predictor of academic achievement. Discussion based on the findings of the study was done. Adolescents must be educated about the importance of harnessing and balancing belief system, peer pressure and self-monitoring skills in their educational lives is one of the recommendations that was made.

Keywords*: Belief system, Peer pressure, Self-monitoring skills and Academic achievement.*

Introduction

Academic achievement represents performance outcomes that include the extent to which a learner has accomplished specific goals that were the focus of activities in instructional environments. Since students' academic achievement depends on a number of variables, it could be enhanced through identifying and manipulating each of such variables. Over the years, the investigations on the factors that influence academic achievement of secondary school students most of whom are adolescents, have attracted the interest and concern of teachers, counselors, psychologists, researchers, and schools administrators in Nigeria (Okolie et al, 2014). This is not unconnected with the public outcry over the poor academic achievement of students in the country (Ogunbanwo, 2014). Ogunsoya (2004) and Akinsolu (2010) reported that academic achievement of students has fallen considerably below expectations. Failure in academics shows that a potential is either lost or not being realized, and the factors militating against it need to be investigated. This is why researches on factors affecting academic achievement have been so important to education researchers. Belief system is the fundamental doctrines, practices, and core values which individuals are convinced are right according to their understanding of their world and which they hold close to their hearts.

Belief systems should be evaluated and well examined because they have far reaching effects in the lives of those who subscribe to them. It can therefore be reasoned that belief system may be

one of the factors influencing academic achievement of adolescents. Adolescents are particularly vulnerable to peer pressure because they are at a stage of development when they are separating more from their parents' influence but have not yet established their own values or understanding about human relationship or the consequences of their behaviour. They are also typically striving for social acceptance at this stage and may be willing to engage in behaviours that will allow them to be accepted but which may be against their better judgment. According to Lashbrook (2013), adolescents are well aware that they influence each other. Peer pressure can provide many positive elements in an adolescent's life. It is important, however, to remember that these pressures can have both positive and negative effects on an adolescent's social adjustment and academic achievement.

Self-monitoring is a low-intensity, secondary prevention strategy designed to improve students' self-management skills and to support their academic, behavioural, and social development (Joseph & Eveleigh, 2015). It involves teaching students how to independently observe and record whether they are engaging in appropriate behaviour at a particular time. This flexible strategy can be used to increase the occurrence of desired behaviours or to decrease inappropriate behaviours. Self-monitoring can be used in virtually any instructional setting (for example, general education classrooms, cafeterias, vocational programmes, and so on) to address a variety of student needs (for example, improving motivation to learn, preventing social adjustment problems, and so on) and to promote greater independence.

Self-monitoring skills are indispensable resources that can aid the promotion of social, academic, and vocational development in all categories of people particularly in adolescents who are naturally more tempestuous. In their study, Johnson and Smith (2013) found that self-monitoring was a potent predictor of students' academic achievement and that both variable correlated significantly and positively with each other.

Previous studies have not addressed the contribution of belief system and self-monitoring skills to academic achievement of adolescent students. Although the influence of peer pressure has been examined by researchers, the findings have not been conclusive due principally to several intervening variables like students' personality characteristics, home background, and other environmental or situational peculiarities. To the best of the knowledge of this researcher, no previous study has attempted to examine the combined influence of belief system, peer pressure, and self-monitoring skills on social adjustment and academic achievement of adolescents in a single study. Furthermore, the relationships among these variables for adolescents in senior secondary schools have not been thoroughly investigated. Finally, most of the related studies have been carried out in foreign countries of Europe and America; much still needs to be done on this issue in Sub-Saharan Africa. This is one of the reasons for embarking on this study.

Purpose of the study

To determine if belief system, peer pressure, and self-monitoring skills will significantly relate with academic achievement of adolescents from Senior Secondary Schools in Ogun State, Nigeria.

Research Hypotheses

Ho1: Belief system, peer pressure, and self-monitoring skills will not significantly relate with academic achievement of adolescent students from Senior Secondary Schools in Ogun State, Nigeria.

H_{o2}: There is no significant relative contribution of belief system, peer pressure, and self-monitoring skills to academic achievement of adolescent students from Senior Secondary Schools in Ogun State, Nigeria.

Methods

Research design

This study adopted the descriptive survey research design of the *ex post facto* type which enabled the researcher to collect data from a cross-section of the target population. In this design, belief system, peer pressure, and self-monitoring skills are the independent variables, while social adjustment and academic achievement are the dependent variables.

Population

The population of this study consisted of all the adolescents among the approximately 58,650 SS1 andSS2 students of the 242 senior secondary schools in Ogun State, Nigeria as at March 2018.

Sample and sampling technique

A sample of 1,800 participants, representing approximately 3% of the population, was chosen through the stratified random sampling technique. The population was divided into three strata which are the senatorial districts in Ogun State, namely, Ogun East, Ogun Central, and Ogun West. Twelve senior secondary schools were chosen from Ogun East, nine from Ogun Central, and eight from Ogun West senatorial districts through simple random sampling, giving a total of 29 secondary schools for this study. Students were then chosen from each school according to the relative number of students in the schools also through simple random sampling.

Instruments

The Belief System Awareness Questionnaire (BSAQ) was developed by Ross (2004) and adopted by this researcher to investigate awareness level of belief systems of the generality of students and employees in academic institutions. The BSAQ consists of 32 items formatted as a 5-point Likert-like scale with responses 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly agree. The scale has demonstrated good reliability and validity. The developer administered the BSAQ to a group of 342 college students in Texas. The scale was re-administered on the same set of respondents after a one-month interval and a stability coefficient of 0.75 was obtained. This implies that the scale has good test-retest reliability. The items on the scale are also internally consistent with one another (Cronbach's alpha = .81). The congruent validity of the BSAQ was demonstrated by a significant correlation ($r = .52$, $p < .05$) with the Belief System Analysis Scale (BSAS) (Fine, Schwebel, & Myers, 1985). This scale has not been used in Nigeria.

The Peer Pressure Scale (PPS) was developed by Steinberg and Silverberg (1987) to assess the extent of peer influence on adolescents. It consists of 11 items formatted as a 5-point Likert-type scale with responses 1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree. The alpha reliabilities of the two sub-scales are Destructive Influence of Peer Pressure ($\alpha = .88$) and Constructive Influence of Peer Pressure ($\alpha = .68$). The overall Cronbach's alpha for the PPS was .84 which was highly satisfactory. The results of the PCA demonstrated the construct validity of the scale. The two sub-scales, Constructive Influence of Peer Pressure (r

= .40) and Destructive Influence of Peer Pressure (r = .92) were significantly correlated with the total scale while correlation between the two sub-scales remained non-significant.

The Revised Self-Monitoring Scale (RSMS) was developed by Lennox (1984) to measure whether or not an individual has the will and ability to change how they are perceived by utilizing impression management in various social situations. It consists of 13 items formatted as a five-point Likert-type scale with possible responses ranging from 1 = Very much unlike me; 2 = Unlike me; 3 = Indifferent; 4 = Like me; 5 = Very much like me. The developer demonstrated that the scale showed adequate test-retest reliability (r = .71, p < .05) with a two-week interval and good internal consistency reliability determined by Cronbach's alpha of .83.

Measure of Academic Achievement

A 50-item achievement test made up of 25 multiple-choice English Language questions with four options and 25 multiple-choice Mathematics questions also with four options was developed by this researcher to measure academic achievement of the SS 2 students used in this study. To guarantee the content validity of the test, two tables of specifications or test blueprints (one for English Language and one for Mathematics) were prepared prior to item generation. An initial pool of 50 multiple-choice English Language questions and 50 multiple-choice Mathematics questions was made.

Method of data collection

To ensure efficiency in data collection, the researcher recruited and trained three research assistants on how to carry out the administration of the instruments. Training in sitting arrangement and other controls such as verbal instructions to be given to participants and emphasis on confidentiality of information supplied and truthfulness of responses were made. Each assistant was based in one of the senatorial districts in Ogun State, familiar with the institutions included in the sample, and able to effectively coordinate the distribution and collection of the instruments

Method of data analysis

The demographic data of participants were analyzed by means of descriptive statistics. The null hypotheses were tested using multiple regression analysis. All tests were carried out at the 0.05 level of significance.

Results

Ho1: Belief system, peer pressure, and self-monitoring skills will not significantly relate with academic achievement of adolescent students from Senior Secondary Schools in Ogun State, Nigeria.

Table 2: *Model Summary of the Multiple Regression Analysis for the Combined Contribution of Belief System, Peer Pressure, and Self-Monitoring Skills to Academic Achievement in Senior Secondary Schools*

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1435.618	3	478.539	5.269	.001[b]
Residual	162105.125	1785	90.815		
Total	163540.743	1788			
Model Summary R = .094; R^2 = .009; $R^2_{(Adj)}$ = .007; Std. Error = 9.52970					

Dependent Variable: Academic Achievement

Predictors: (Constant), Peer Pressure, Self-Monitoring Skills, Belief System

Results in Table 2 showed that belief system, peer pressure, and self-monitoring skills significantly contribute to academic achievement of adolescent students in Senior Secondary Schools ($F_{(3, 1785)} = 5.269$, $p < .05$). The null hypothesis which stated that there is no significant combined contribution of belief system, peer pressure, and self-monitoring skills to academic achievement of adolescent students from Senior Secondary Schools in Ogun State, Nigeria was therefore rejected, leading to the conclusion that there is a significant combined contribution of belief system, peer pressure, and self-monitoring skills to the total variance in academic achievement of adolescent students from Senior Secondary Schools in Ogun State, Nigeria.

H_{o2}: There is no significant relative contribution of belief system, peer pressure, and self-monitoring skills to academic achievement of adolescent students from Senior Secondary Schools in Ogun State, Nigeria.

Table 3: *Coefficients of the Multiple Regression Analysis for the Relative Contribution of Belief System, Peer Pressure, and Self-Monitoring Skills to Academic Achievement*

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	28.655	1.581		18.119	.000
Belief system	-.007	.011	-.015	-.645	.519
Self-monitoring skills	-.076	.025	-.073	-3.076	.002
Peer pressure	.081	.029	.066	2.762	.006

Dependent Variable: Academic Achievement
Predictors: (Constant), Self-Monitoring, Belief System, Peer Pressure

Table 3 revealed both significant and insignificant results. Self-Monitoring Skills (B = -.076; β = -.073; t = -3.076; $p < .05$) and Peer Pressure (B = .081; β = -.066; t = 2.762; $p < .05$) were significant predictors of academic achievement of the adolescent Senior Secondary School students, while Belief System (B = -.007; β = -.015; t = -.645; $p > .05$) was not a significant predictor of their academic achievement. It is consequently concluded that there was a significant relative contribution of self-monitoring skills and peer pressure, and insignificant relative contribution of belief system to academic achievement of adolescent students from senior secondary schools in Ogun State, Nigeria.

Discussion of findings

The study indicated that belief system, peer pressure, and self-monitoring skills are constructs that could enhance academic achievement. For example, having a belief system that emphasizes hard work and diligence, relating with academically inclined peers who can motivate academic engagements, and being able to call oneself to order to avoid or rectify behavioural errors can go a long way in improving study habit and academic achievement. Finally, the use of self-monitoring skills could help students to monitor or regulate their behaviour and be more focused on academic activities. Through the use of these skills, students are able to identify their strengths and weaknesses in their studies, consolidate on their strengths, and work to improve on their weaknesses, leading to improved academic achievement.

This result corroborated Ickes, Holloway, Stinson, and Hoodenpyle (2006) who examined the influence of self-monitoring skills and religious belief on social adjustment of 308 adolescents and adults who were students and staff of selected colleges in Boston and found that high self-monitors from religious homes had the higher level of social adjustment than respondents who are low self-monitors from secular homes and who had the lower level of social adjustment.

Also the findings revealed the significant relative contribution of peer pressure and self-monitoring skills to the academic achievement of students in senior secondary schools could be explained by the nature and operation of these variables. Association with positive, educationally minded peers could lead to greater intellectual intercourse or exchange of academic ideas which could enhance the general academic achievement of the members of the group. Conversely, relating with peers who place no premium on academic or intellectual pursuits but follow after frivolities could lead to a decline in academic achievement of the members of the group. This implies that peer pressure could have a significant relative contribution to the prediction of academic achievement as found in this study. Self-monitoring skills of students also could help them to identify and take immediate corrective actions for study problems. This could ultimately improve academic achievement.

The result of a significant relative contribution of self-monitoring skills to the total variance in academic achievement of adolescents from senior secondary schools supported Rafferty and Raimondi (2009) who investigated the differential effects of self-monitoring of attention and self-monitoring of performance among a group of emotionally disturbed students who were engaged in independent math practice and found that self-monitoring was beneficial by providing students with a focus geared toward enhancing their academic achievement. Also supported by this finding was that of Kauffman and Landrum (2009) who concluded in their study that self-monitoring can be individualized to fit a student's academic level, thereby improving his or her performance in school. This finding also agreed with the findings in a study conducted by Bruhn & Watt (2012) which showed that self-monitoring skills are beneficial to academic achievement.

The result of a significant contribution of peer pressure to academic achievement agreed with Bankole and Ogunsakin (2015) who examined the influence of peer pressure on the academic achievement of a sample of 225 secondary school students in Ekiti State, Nigeria, and found a significant influence of peer pressure on the students' academic performance. Specifically, they found that peer pattern of socialization, peer location, motivation of peers, and peers' religious affiliation each had a significant influence on their academic performance. Finally, the result supported Sheffield and Waller (2010) who in their study came to the conclusion that self-monitoring can equip students to assume greater responsibility and participate more actively in their learning. Finally, this result corroborated Daly and Ranalli (2003) who stated that self-monitoring is a flexible strategy which can be tailored to address academic and behavioural deficits of students. The self-monitoring strategy can positively affect behaviour and lead to improved academic achievement. This result contradicted Barrett (2009) who investigated a sample of high school students and found a strong influence of religious belief on positive educational outcomes.

Conclusion

The study concluded, among others, that peer pressure and self-monitoring skills significantly relate with academic achievement and that the combined contribution of belief system, peer pressure, and self-monitoring skills to academic achievement was significant.

Recommendations

Based on the findings and conclusion of this study, the following recommendations are made:

(i) Parents, teachers, counsellors, and significant others should create awareness in adolescents of the effective role played by the combination of belief system, peer pressure, and self-monitoring skills in their academic achievement. Adolescents must be educated about the importance of harnessing and balancing these three factors in their educational lives.

(ii) Parents and guardians should find the time to guide and reason with their adolescent children and wards to prevent them from associating with dangerous and unhelpful peers, imbibing harmful and intolerant belief systems, and help them to see the need for monitoring or regulating their behaviour which will in-turn impact greatly on academic achievement.

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