Goal-Setting, Value-Orientation and Learning Styles as Predictors of Undergraduates' Academic Achievement in Distance Learning System: Implications for Policy and Counselling

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Abstract

This is an investigation of goal-setting, value-orientation and learning styles as predictors of undergraduates' academic achievement in distance learning system. The aim is to point out the implications of such factors for policy and counselling services designed to assist distance learning students. The study used ex post facto research design in which 200 DLS students (Males = 100 (50%); Females = 100 (50%) made up the sample for the study. Three instruments developed and validated by the researchers were used in the study. These are Goal Setting Questionnaire (GSQ) with Cronbach alpha = 0.72; Value Orientation Questionnaire (VOQ) with Cronbach alpha = 0.88 and Learning Styles Assessment Scale (LSAS), Cronbach alpha = 0.92. Academic achievement was assessed using students' current GPA. Two research questions were answered using 0.05 alpha level. Findings revealed the combined and independent contributions of goal setting, value-orientation and learning styles to the prediction of academic achievement among DLS students. It is recommended that comprehensive orientation services focusing on the factors influencing academic achievement especially learning styles, goal setting and value-clarification should be organized for DLS students before the commencement of their studies.

Keywords: DLS, learning styles, goal orientation, value orientation, academic achievement.

Background to the Study

The need for continuous education by the working class in Nigeria is apparently very high. There is an increase in the enrolment of people into distance learning programmes and this is why many of the conventional universities now mount distance learning programmes. However, many Nigerian students undergoing courses in DLS often express fears on the effectiveness of the programme and the possibility of the students graduating with honours on the completion of their courses. Since high academic achievement is highly desirable by students undergoing DLS just like their counterparts running full-time courses in conventional institutions, the need to identify factors predicting students' academic achievement in DLS cannot be over emphasized. Academic achievement, especially academic failure, is often viewed in narrow terms, as an individual behavior limited to the early life course. However, academic achievement has implications that play out across life stages especially for DLS students. On the individual level, academic struggles predict short-term problem behavior and dropout, and can derail educational and occupational trajectories well into adulthood. It can also lead to ego problems as adults may feel derailed when their young ones get to know that they are not doing fine in their DLS courses (Crosnoe, 2002). While several factors may predict students' academic achievement, previous research findings emphasized the influence of goal-setting, value-orientation and learning styles on the academic performance of students running full-time courses in conventional institutions. However, the contributions of these factors to students' academic achievement in DLS have not been conclusively established. Moreover, the DLS is relatively new in Nigeria and there is apparent need to identify factors which may influence academic achievement of students in DLS. Therefore, this study investigates the predictive contributions of goal-setting, value-orientation and learning styles on the academic achievement of DLS students.

Literature Review

Distance learning or distance education refers to an educational system in which the professor and the student are separated from the point of view of distance. In order to achieve the necessary collaboration for an educational process, a DL system has to use the technology, even if we speak about the simple utilization of the printed materials or advanced technologies that involve audio-video communication (Honey, 2001). Distance learning is a planned teaching/learning experience that uses a wide spectrum of technologies to reach learners at a distance and is designed to encourage learner interaction and certification of learning (Greenberg, 1998). Recent and rapid technological developments raise questions whether distance education theory has kept pace with new, affordable applications of communications technology and the changing educational needs of a learning society. It must be noted that technology does not teach students; effective teachers do (Palloff and Pratt, 2000). They make the point that the issue is not technology itself, but how it is used in the design and delivery of courses. Too often instructors do not design their lessons to take advantage of the technology presented. This affects the quality of the instruction. In distance learning students and teachers will find themselves playing different roles than is the norm in traditional education (Keirsey, 1998). The teacher is no longer the sole source of knowledge but instead becomes a facilitator to support student learning, while the student actively participates in what and how knowledge is imparted (Cuban, 2001). More than any other teaching method, distance learning requires a

collaborative effort between student and teacher, unbounded by the traditional limits of time, space, and single-instructor effort.

Technology has also changed the face of education. Advances in telecommunications technology has opened up the possibility of personal and group interaction in distance education. Research suggests that the effectiveness of distance learning is based on preparation, the instructor's understanding of the needs of the students, and an understanding of the target population (Omoregie, 1997). According to Cuban (2001) the successful student needs to have a number of characteristics such as tolerance for ambiguity, a need for autonomy, clearly defined goals, and an ability to be flexible. Garrison (2000) found that compared to most face-to-face learning environments, distance learning requires students to be more focused, know their values, become better time managers, and be able to work independently and with group members. Many distance learners are different from traditional undergraduates in that they are already in professions. They have well defined goals and are more motivated (Ziegert, 2000). As we saw earlier, distance education students need to feel a part of a community. Greenberg (1998) describes this as a virtual learning community. A major area of concern for the distance student is the perceived lack of feedback or contact with the teacher. Because there is not daily or weekly face to face contact with teachers, students may have trouble in self-evaluation (Galusha, 2008).

There are a variety of learning styles including Conceptual Tempo (Kagan et al., 1964) and Hemisphercity (Cuban, 2001) approaches to the Convergent/Divergent thinking (Greenberg, 1998) and Independent/Dependent (Ziegert, 2000) techniques. According to Omoregie, (1997), field independence/dependence is "by far" the most relevant to DLS students. This learning approach measures how much students are able to overcome the effects of distracting background elements when they attempt to differentiate relevant aspects of a particular situation (Cuban, 2001). Garrison (2000) stated that field independent students show greater interest in their studies and they are able to achieve much by reading course materials with or without any facilitator. In contrast, field dependent students, prefer a higher level of social sensitivity and prefer structured activities that require involvement with others. They can hardly benefit from their course materials with direct contacts with their facilitators. Field dependent persons are better at learning and remembering social material, and field independent persons are better at learning and remembering impersonal material.

Research Questions
1. What is the composite contribution of goal-setting, value-orientation and learning styles to the prediction of academic achievement in DLS?
2. What is the relative contribution of goal-setting, value-orientation and learning styles to the prediction of academic achievement in DLS?

Significance of the Study
This study is significant because the need to understand factors predicting students' achievement in DLS remains very vital in the effort to achieve the goals of distance learning system in Nigeria in particular and for the global educational development in general. Specifically, the findings of this study would be very useful to school psychologists, university administrators, counsellors and educators who are concerned about the academic achievement of DLS students. It is necessary to understand how factors predicting students' achievement in DLS

before one can formulate appropriate policies and design relevant remedial counselling services which could help in facilitating students' academic achievement in DLS.

Methodology

This study used ex post facto research design because the factors were objectively studied without manipulating any of them to cause a change in the other. Instead, questionnaires were used for data collection from a representative sample and the data generated were analysed to provide an objective description of the phenomenon.

Population and Sample

Students running DLS at the National Open University of Nigeria, Abeokuta, Ogun state centre constituted the target population. 200 students (Males = 100 (50%); Females = 100 (50%) made up the sample for the study. The stratified random sampling technique along gender divide was employed in selecting the actual sample for the study. The age range of participants was 24 - 57 years with a mean age of 33.04 years and standard deviation of 2.18.

Instrumentation

Three instruments developed and validated by the researchers were used in the study. The first is the Goal Setting Questionnaire (GSQ). It is a 6-item, 4-point scale measuring goal-setting. It yielded 0.72 on Cronbach alpha and 0.81 co-efficient of reliability using test re-test reliability method. The second instrument is Value Orientation Questionnaire (VOQ) containing a 7-item scale measuring value orientation. It has 0.88 Cronbach alpha and 0.76 reliability index. The third is Learning Styles Assessment Scale (LSAS). It is a 7- item scale measuring learning styles. It yielded 0.92 on Cronbach alpha and 0.79 co-efficient of reliability. Academic achievement was assessed using students' current GPA.

Procedure

The instruments were administered one after the other by the researchers with the aid of four research assistants. The research assistants were trained before the commencement of the study. After, selecting the sample, participants were briefed about the objectives of the study and they were encouraged to respond objectively to the instruments by assuring them that all responses would be treated with utmost confidentiality. The researchers also offered to clarify any of the item on which they sought further clarifications. The instruments were retrieved immediately after completion. The administration of the instruments lasted 30 minutes on average.

Data Analysis

The data were analyzed using regression analysis on the SPSS. All results were considered for significance at 0.05 level.

Results

The analysis of data was done using multiple regression analysis and the results considered for significance at 0.05 levels are presented below;

Table 1: Summary of regression Analysis on Combined Influence of Independent Variables (Goal-setting, Value-orientation and Learning Styles) on Dependent Variable (Academic achievement) of DLS Students

R = .691 R square = .4774 Adjusted R square = .112 Standard Error of Estimate = 10.21					
	Sum of Squares	**Df**	**Mean Square**	**F**	**P**
Regression	18233.426	3	6077.8087	12.576	.001
Residual	94721.262	196	483.272		
Total	11.2954.688	199			

Table 1 revealed significant combined contribution of goal setting, value-orientation and learning styles to the prediction of academic achievement among DLS students (F = 12.576; p < 0.05). The results also yielded a coefficient of multiple regression R of 0.691 and multiple R-square = .4774. This suggests that the three factors combined accounted for 47.74% of the variance academic achievement among DLS students. The other factors accounting for 52.26% of the variance in academic achievement among DLS students is beyond the scope of this study.

Table 2: Relative Influence of Independent Variables (Goal-setting, Value-orientation and Learning Styles) on Dependent Variable (Academic achievement) of DLS Students

Model	Undestandardized Coefficients		Standardized Coefficients		
	B	**Std Error**	**Beta**	**T**	**Sig.**
Goal-setting	.381	.141	.132	2.211	.001
Learning-styles	.823	.291	.321	4.225	.000
Value-orientation	.218	.122	.128	2.143	.031

Table2 above showed that the three factors are potent predictors of academic achievement. The most potent factor was learning styles (B=.823, t= 4.225, P < 0.05), followed by goal-setting (B =. 381; t = 2.211; P < 0.05) while value-orientation was the least predictor (B = .218; t = 2.143; p < 0.05). Thus, each of the identified factors made varying contributions to academic achievement of DLS students. These results suggest that learning styles, goal-setting and value-orientation independently predicated academic achievement of DLS students.

Discussion and Conclusion
The findings of this study revealed the combined and independent contributions of goal setting, value-orientation and learning styles to the prediction of academic achievement among DLS

students. The three factors jointly predicted the academic achievement among DLS students. This means that DLS students can perform well academically if they receive adequate orientation and counselling on the possible influence of learning styles, goal-setting and value-orientation since these factors significantly predicated academic achievement. The present finding corroborates Omoregie (1997) who suggests that the effectiveness of distance learning is based on preparation, the instructor's understanding of the needs of the students, and an understanding of the target population. It also agrees with Hardy and Boaz (1997) who observed that compared to most face-to-face learning environments, distance learning requires students to be more focused, better time managers, and to be able to work independently and with group members. It also corroborates Garrison (2000) who stated that field independent students show greater interest in their studies and they are able to achieve much by reading course materials with or without any facilitator. In contrast, field dependent students, prefer a higher level of social sensitivity and prefer structured activities that require involvement with others. They can hardly benefit from their course materials with direct contacts with their facilitators.

Implications for Counselling
The findings of this study imply that counselling is indispensable in the effort to enhance academic achievement among DLS students. Comprehensive, carefully designed and effectively delivered counselling services should be made available to DLS students in order to assist them understand, strengthen and enhance their learning strategies, goal orientation and value-orientation.

Conclusion and Recommendations
The findings of this study led to the conclusion that DLS students need orientation and counselling on learning styles, goal-setting and value-orientation since these factors significantly predicated academic achievement. The implication is that if individuals understands his/her learning styles, identifies and defines his/her goals clearly and knows his/her values, attaining high academic achievement will be easier and faster.

Therefore, it is recommended that comprehensive orientation services focusing on the factors influencing academic achievement especially learning styles, goal setting and value- orientation training should be organized for DLS students before the commencement of their studies. Moreover, counselling services should be geared towards promoting effective learning styles, encouraging clear and realizable goal setting and promoting value-orientation skills.

References

Crosnoe, R. (2002). High School Curriculum Track and Adolescent Association with Delinquent Friends. *Journal of Adolescent Research.17:144–168.*

Cuban, L. (2001). *Oversold and underused: Computers in the classroom*. Cambridge, MA: Harvard University Press.

Galusha, J. M. (2008).*Barriers to Learning in Distance Education. Retrieved on 07/05/2011 from http://www.infrastruction.com/barriers.htm*

Garrison, R. (2000). Theoretical Challenges for Distance Education in the 21st Century: A Shift from Structural to Transactional Issues. International Review of Research in Open and Distance Learning ISSN: 1492-3831, 1 (1), 1-17.

Greenberg, G. (1998). Distance education technologies: Best practices for K-12 settings. *IEEE Technology and Society Magazine*, (Winter) 36-40.

Honey, M. (2001). Issues to support local school change. Retrieved August 12, 2011. Available online at http://www.pt3.org/VQ/html/honey.html.

Kagan, J., Rosman, B.L., Day, D., Albert, J., & Phillips, W. (1964). Information processing in the child: Significance's of analytical and reflective attitudes. *Psychological, 324-331.*

Monographs, a(1).Keirsey, D. (1998). *Please Understand Me II.* Del Mar, CA: Prometheus Nemesis. Also at   http://www.keirsey.com .

Omoregie, M. (1997). *Distance learning: An effective educational delivery system.* (Information Analysis 1070). (ERIC Document Reproduction Service No. ED 418 683).

Palloff, R., & Pratt, K. (2000). *Making the transition: Helping teachers to teach online.* Paper presented at EDUCAUSE: Thinking it through. Nashville,Tennessee. (ERIC Document Reproduction Service No. ED 452 806).

Ziegert, A.L. (2000). The role of personality temperament and student learning in principles of economics: Further evidence. *Journal of Economic Education*, Vol. 31, pp. 307-322.