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Learning Strategies and Academic Performance: A Study of the Successful Distance Learners of PGDDE programme of IGNOU

Prabir Kumar Biswas



Indira Gandhi National Open University
Maidan Garhi, New Delhi-110068 (India)

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PRABIR KUMAR BISWAS

STRIDE, Indira Gandhi National Open University, New Delhi, India

Abstract: *The aim of the present study is to find-out the relationship, if any, between learning strategies adopted by the distance learners and their level of academic performance. A sample of 150 successful distance learners of the PGDDE programme of IGNOU was randomly selected for this study. A structured questionnaire was developed to collect data in relation to the objectives of the study. The questionnaire was administered on 16 learners in face-to-face situation and was later sent to 134 learners by post. 92 filled in questionnaires were received and analysed for this study. Age, sex and previous academic qualifications had no effect on the present academic performance of the learners of PGDDE. Some disturbance at home faced by the learners during study did not affect their academic performance. Total hours of study, specific learning skills adopted (reading technique, note making while studying etc.), number of activities (SAQs) attempted during study etc. have shown some positive effect on the academic performance of the distance learners.*

Introduction

Michael Prosser and Keith Trigwell, two eminent researchers on student learning say:

“Learning and teaching in higher education needs to be seen as a scholarly activity, teachers need to be continually researching their students and their students’ learning. Teachers need to be continually trying new ways of helping their students develop their understanding of the subject matter being taught. There is not one right way to teach, just as there is not one right way to learn” (Prosser and Trigwell, 1999).

These remarks have equal importance in the contexts of both face- to-face learning and open learning.

A review of research in higher education in the area of student learning reveals that approaches to learning are strongly related to the quality of their learning outcome. Students generally follow two different approaches: *deep approach* and *surface approach*. In deep approach students engage with the learning task, aim to understand ideas, and try to relate new things to other things they already know. In surface approach, students appear to be involved in study without reflection on the purpose or strategy (Ramsden, 1992; Marton, Hounsell and Entwistle, 1997).

In an open and distance learning situation, students use different strategies for learning. Some students achieve good results, some do not. Students generally come from a wide variety of backgrounds. Often it is seen that the students coming from disadvantaged backgrounds do not have effective or appropriate learning skills to cope with the courses they select (Datta, 1998; Simpson, 2000).

In India, some researchers have made attempts to investigate the study skills or strategies of distance learners (Donga, 1993; Mouli and Rao 1993; Villi, 1999). The study conducted by Donga (1993) examines the study skills of distance learners with reference to their family and educational backgrounds, occupations, and programmes for which they took admission. Mouli and Rao (1993), examine the study skills of distance learners which include variables like — time schedule, summary writings, consultation of dictionary, writing notes, whole and part learning and so on. Villi (1999) has also reported the pattern of learning habits of the postgraduate distance learners.

The study skills or strategies discussed by the above authors would have much more significance, if an attempt is made to relate study skills or strategies with the level of academic performance of the learners. Distance learners need to develop some study skills which would help them to cope with any kind of instructional materials. It is expected that with good study skills, the learners will spend less time in studying, learn more in a given period of time and perform well in the examination.

There is no general agreement as such on good learning strategies or skills. Research findings in this area indicate that making notes while learning seem to be an important element of any student's learning skills (Simpson, 2000), negative association too between note making and students learning (Gibbs, 1981), which are conflicting in nature.

The main purpose of the present study is to find out a possible link between the learning strategies adopted by the learners of PGDDE programme of IGNOU, and their academic performance.

Objectives

The objectives of this study are to investigate whether:

- i) age, sex and previous educational qualifications of the PGDDE learners have any effect on their present academic performance;
- ii) physical conditions during the study (place, physical posture and disturbance) have caused any effect on academic performance;
- iii) the amount of time spent during study has shown any effect on academic performance; and
- iv) reading techniques adopted by the learners have caused any effect on their academic performance.

Methodology

Sample: A sample of 150 successful distance learners of the PGDDE programme of IGNOU were randomly selected for this study.

A structured questionnaire consisting of 44 items was developed to collect data in relation to the objectives of the study. Some items were divided into smaller units for obtaining

clear-cut responses from the learners. The specific areas covered in the questionnaire were as follows:

- background characteristics of the learners- age, sex, educational qualifications;
- physical conditions of study – place, physical posture, disturbance during study;
- hours spent in study;
- reading techniques adopted to study- SQ3R technique, note making;
- quantum of the contents (units) covered;
- attempt at SAQ's;
- number of academic counselling sessions attended.

The questionnaire was administered on 16 successful learners of PGDDE, in a face-to-face situation. The respondents had no difficulty in answering the questions.

Later the questionnaire was sent to 134 successful learners of the PGDDE programme. Seventy-seven learners returned the filled-in questionnaires. One questionnaire was incomplete. So, 76 questionnaires received by post alongwith 16 collected in face-to-face situation by the investigator (in all 92) were analysed for this study.

Postgraduate Diploma in Distance Education (PGDDE) Programme of IGNOU

The PGDDE programme of IGNOU has been designed to provide essential know how, skills and professional knowledge for various categories of staff involved in developing and maintaining higher distance education programmes and also for those who want to join open and distance learning in future. The programme consists of five courses. This is a 30 credit programme. Credit is based on time factor involved in completing all the relevant learning activities. One credit is equivalent to 30 hours of study. Print is the main medium of instruction for the programme. This is supplemented by a few audio and video programmes. There is a provision for face-to-face academic counselling also, which is optional.

The minimum duration to complete the programme is one year and the maximum is four years. Any Bachelor degree holder from any discipline can join this programme. PGDDE has been on offer from 1994.

Evaluation system

IGNOU adopts a two-tier system of evaluation for this programme: (i) continuous evaluation through tutor-marked assignments and (ii) term-end examination. Proportionate weightage is given to both components for evaluation purposes.

IGNOU provides specific guidelines for evaluation of the assignment responses and answer scripts in order to ensure uniformity in evaluation. Only descriptive or essay type questions are given. Each question in the answer script is awarded a letter grade according to the level of performance judged by the evaluator. A five point scale (i.e. A,B,C,D, E) has been adopted, 'A' being the highest and 'E' being the lowest point. The notional values assigned to them are depicted in Table-1.

Table 1: Distribution of range of scores across letter grades with respect to PGDDE programme

Letter Grade	Point Grade Range	Percentage Equivalence	Qualitative value
A	4.50 & above	80 % & above	Excellent
B	3.50 to 4.49	60% to 79.9%	Very Good
C	2.50 to 3.49	50% to 59.9%	Good
D	1.50 to 2.49	40% to 49.9%	Satisfactory
E	0 to 1.49	Below 40%	Unsatisfactory

Results and Discussion

Gender-wise academic performance

Table-2 indicates academic performance of the male and female learners. There is no significant difference in academic performance between male and female learners. More than 70% male and 71% female learners have obtained B grade. Other learners have got C grade. No learner has obtained either A or D grade. So, while presenting academic performance of the learners in consecutive tables, A and D grades have been omitted.

Table-2: Academic performance of the male and female learners

Gender	Number of learners	Overall grade (learners in percentage)			
		A	B	C	D
Male	78	0	70.51	29.49	0
Female	14	0	71.43	28.57	0

Age-wise academic performance

The learners were grouped into four different age groups: 20-29 years, 30-39 years, 40-49 years and 50-59. Table-3 shows age-wise academic performance of the learners. Both the learners who belong to the highest age group have obtained B grade, 66.67% of the learners belong to the lowest age group have got B grade. Overall findings reveal that increasing age has caused no effect on the academic performance of the learners.

Table-3: Age-wise academic performance

Age	Number of Learners	Overall grade (learners in percentage)	
		B	C
20 - 29	30	66.67	33.33
30 - 39	32	71.87	28.13
40 - 49	28	64.29	35.71
50 - 59	02	100.00	0

Previous academic qualification and present academic performance

The learners were re-grouped according to their previous academic qualifications. Table-4 indicates that 26 learners were graduates and 66 learners were postgraduates at the time of completion of PGDDE programme. Both the graduate and postgraduate degree holders have obtained almost similar grades, indicating that previous academic qualification had no significant effect on the present academic performance of the learners.

Table-4: Previous academic qualification and present academic performance

Qualification	Number of Learners	Overall grade (learners in percentage)	
		B	C
Graduate	26	65.38	34.62
Post graduate	66	63.64	36.36

Physical conditions (place of study and physical posture)

Table-5 shows 76 learners have used study room during studies. They have studied sitting upright at a table. Among them 68.75% have obtained B grade and 31.25% have got C grade, whereas 93.75% of the learners who have studied either sitting or lying on a bed in their bedroom have got C grade.

Table-5: Place of study, physical postures and level of academic performance

Place and physical posture	Number of Learners	Overall grade (learners in percentage)	
		B	C
Study room (sitting on a chair)	76	68.75	31.25
Bed room sitting/lying on a bed)	16	6.25%	93.75

The findings suggest that place and physical postures at the time of studying are important. The best position for study may be to sit upright at a table (preferably in a study room). This posture helps most of the learners to concentrate more on their study materials than sitting or lying on a bed and study.

Disturbance at home during study

Table-6 shows that 62 learners sometimes felt disturbance during their study, and 30 learners have not felt any disturbance. Around 69% of the learners who felt disturbance obtained B grade, and only 33.33% learners who hadn't faced any disturbance during their study obtained B grade. The findings revealed that some disturbance during study had not had any negative effect on the academic performance of the learners.

Table-6: Disturbance at home during study vis-a-vis level of academic performance

Disturbance felt during study	Number of Learners	Overall grade (learners in percentage)	
		B	C
Sometimes	62	69.23	30.77
Not at all	30	33.33	66.67

Amount of time spent in studies

How much time one should spend studying? It depends on the subject matter or the content of the study materials, and how well one knows the subject or the content. According to the credit rating of the PGDDE programme, the learner needs to devote around 900 hours to complete all the learning activities. The present findings reveal that 46 learners have spent less than 800 hours, 24 learners spent 800-1000 hours and 22 learners more than 1000 hours to complete the programme (Table-7). A large per centage of the learners (83.33%) who spent 800 –1000 hours have obtained B grade. Around 55% of the learners who spent more than 1000 hours have obtained B grade and only 50% of the learners who spent less than 800 hours have obtained B grade. The present findings support the credit rating of the PGDDE programme.

Reading techniques followed

The successful learners of PGDDE programme were asked whether they have used any specific techniques to read the study materials. Thirtytwo learners reported that they followed SQ3R technique, others (60%) did not follow any specific technique for reading (Table-8). The findings reveal that 62.50% of the learners who had followed SQ3R technique obtained B grade, whereas only 33.33% of the learners who had not followed any specific technique got B grade. The findings suggest that there is some relation between reading techniques or strategies and the academic performance of the learners.

What is SQ3R technique?

The learners of PGDDE programme are well aware of SQ3R reading technique as it has been discussed in one of the courses (ES-313) of the PGDDE programme. SQ3R stands for the initial letter of five steps in reading a book, chapter or a unit. These steps are: (i) Survey, (ii) Question, (iii) Read, (iv) Recall and (v) Review.

Survey of a distance learning unit refers to a quick look at the title of the unit, objectives, section headings sub-section headings, tables, boxes, self-check questions, activities, glossaries and so on. This helps us to know what the topic is about within each unit/section/sub-section. *Survey* of the unit may raise several questions in the learner's mind (e.g., How far the learner can depend on that unit? Are the contents heavy? Can the learner complete the unit in 2 or 3 sittings? and so on). These questions may help the learner in deciding on how he/she might treat the content of a particular unit. At the time of reading, the learner applies his/her mind. Generally he/she looks for the main idea at the first reading, then goes for the specific ideas. A good reader (learner) tries to find out the topic of each section of the unit, and then tries to find out what the teacher/author wants to communicate through the topic. Thus, he/she can find out the central idea of each section.

A good reader (learner) is able to react to the message in the text. He/she can assimilate, analyse and evaluate the information given in the text.

A good learner makes regular attempts to recall. He/she often review the content to check the validity of recall. Although the steps of SQ3R are in a logical order, there may be overlaps and repetitions between them.

Table-7: Hours spent to study the PGDDE courses vis-à-vis level of academic performance

Hours spent to study	Number of Learners	Overall grade (learners in percentage)	
		B	C
Less than 800	46	50.00	50.00
800-1000	24	83.33	16.67
More than 1000	22	54.55	45.45

Table-8: Reading technique (SQ3R) used vis-a-vis level of academic performance

Reading technique	Number of Learners	Overall grade (learners in percentage)	
		B	C
SQ3R technique followed	32	62.50%	37.50%
No specific technique followed	60	33.33%	66.67%

Quantum of contents (units) covered

In response to specific questions, 80 learners replied that they had covered all the units of the programme. Others (12) covered less than 75% of the units (Table-9).

A large per centage (70%) of the learners who had covered all the units obtained B grade, whereas all the learners who had covered less than 75% of the units obtained C grade. The questions for continuous assessment and term-end examination are framed in such a way to cover all the units of the programme. So, to obtain a very good grade, the learners need to go through all the units thoroughly. The present findings prove the same.

Table-9: Quantum of contents (units) covered vis-à-vis of academic performance

Units covered	Number of Learners	Overall grade (learners in percentage)	
		B	C
All the units covered	80	70.00	30.00
Less than 75% of the units covered	12	0	100.00

Making notes while studying

There is a general understanding that making notes while learning helps the learner in two ways: (i) it keeps the learner active, and (ii) it helps to concentrate more while learning.

There are various ways of making notes e.g., underlining main ideas, summarising, outlining and so on, The learners may use separate sheets of various types and sizes, or they can use the wide margins left for making notes in distance learning materials as prepared by IGNOU. The present findings revealed that 84 learners had the habit of taking notes at the time of studying (Table-10). Most of the learners have reported that they preferred to note down essential points in an almost diagrammatic fashion. This is called outlining. Sometimes they have listed the minute details also. These learners have performed comparatively better in their examinations than those learners who had not practiced note-making while studying (Table-10).

Table-10: Note making vis-à-vis level of academic performance

Keeping notes	Number of Learners	Overall grade (learners in percentage)	
		B	C
Yes	84	71.43	28.57
No.	08	12.50	87.50

Attempts to do activities in self-learning materials

Several research studies have suggested that activities in self-learning materials (SLMs) are a very important and useful component (Lockwood, 1992; Mishra and Gaba, 2001). Parer (1988) found that in-text activities are very important in helping the learners to learn effectively. Distance learners perceive attempting activities (self-assessment questions and terminal questions) help them to understand the text better (Mishra and Gaba, 2001). The present findings reveal that 64% of the learners who had attempted more than 50% listed activities of the PGDDE programme have obtained B grade, and 51% of the learners who had attempted less than 50% of the activities have obtained B grade (Table-11). Attempts to do activities do have some effects on the overall academic performance of the learners.

Table-11: Activities attempted by the learners vis-à-vis their academic performance

Listed activities attempted	Number of Learners	Overall grade (learners in percentage)	
		B	C
More than 50%	39	64.00	36.00
Less than 50%	53	51.00	49.00

Academic counselling sessions attended

The PGDDE learners of IGNOU generally attend the academic counselling sessions when they need some academic (tutorial) support from the university. It is expected that if the doubts related to the study units are cleared by the academic counsellor, the learner will perform better in the examination. However, the present findings reveal that only 42.31% of the learners who had attended more than 10 academic counselling sessions have obtained B grade, whereas 83.33% of the learners who had not attended any counselling session have obtained B grade (Table-12). Academic counselling sessions of PGDDE have shown no effect on the overall academic performance of the learners.

Table-12: Academic counselling attended by the learners and their level of academic performance

No. of counselling session attended	Number of Learners	Overall grade (learners in percentage)	
		B	C
More than 10	26	42.31	57.69
Less than 10	30	33.33	66.67
Not at all	36	83.33	16.67

Conclusions

The findings of the present study suggest that age, sex and previous academic qualifications have no effect on the academic performance of the distance learners of PGDDE programme of IGNOU. Even some disturbances at home during their study have not affected their performance. As the learners have performed differently, i.e. some have obtained B grade (60% to 79.90% marks) and some have obtained C grade (50% to 59.90% marks), definitely there are some factors which have caused some effect on their performance. One important factor is the learning strategy followed by the individual learner.

When the successful learners of the present study were re-grouped according to the learning strategies they followed, and their level of academic performance was analysed, some positive effect was noted. Total hours spent in studies, the reading techniques followed, notes taking, the quantum of units (content covered), the number of activities attempted etc., have clearly shown some effect on the academic performance of the learners.

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[**Dr. Prabir Kr. Biswas** is Senior Lecturer in Distance Education. Correspondence: STRIDE, Indira Gandhi National Open University, New Delhi – 110068. e-mail: pkbiswas@hotmail.com]