Open University / Distance Learners' Academic Self-concept and Academic Performance

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Introduction

Self-concept is defined an organised cognitive structure comprised of a set of attitudes, beliefs and values that cut across all facts of experience and action, organising and tying together the variety of specific habits, abilities, outlooks, ideas and feeling that a person displays. In the late fifties, Carl Roger proposed a new dimension to self-concept. He classified the self-concept as real and ideal self-concept. The real self-concept is the self-as-actually perceived and the ideal self-concept is the self-as-ideally desired. Roger further suggested that both are measurable and diagnostically useful notions.

Considerable body of literature is now available which deals with the nature of self-concept, components of self-concept, types of self-concept and development of self-concept. Mid seventies witnessed to a number of empirical researches on this subject. The research studies on self-concept come out with theoretical structure for the multi-dimension and hierarchical structure for self-concept. Further, Shavelson, *et al* (1976) indentified a number of distinctive features of self-concept such as : (i) organised, (ii) multifaceted, (iii) hierarchical, (iv) stable (general self-concept)/unstable (situational), (v) developmental, (vi) descriptive; and evaluative; and (vii) differentiable from other constructs.

Shavelson *et al* (1976) was first to propose a general self-concept defined by academic and non-academic self-concepts. Academic self-concept was further divided into self-concepts in particular content areas and non-academic self-concept was divided into social, physical and emotional self-concepts. The multi-dimensionality of self-concept has been clearly supported by some of the studies conducted by Byrne (1984), Byrne and Shavelson (1987), Dusek & Flacherty (1981), Flaming & Courtney (1984), Harter (1982), Marsh, Barnes & Hocevar (1985), Soares and Soares (1982).

Shavelson *et al* (1976) also emphasized the hierarchical structure of self-concept. He hypothesized that self-concept is hierarchically structured and, therefore, correlations among facets produce a pattern whereby the correlation between subject specific self-concepts and academic self-concept were highest between academic self-concept and general self-concept the next highest and, finally, between subject specific self-concepts and general self-concept the lowest. This hypothesis has been tested and supported by

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the studies conducted by Byrne (1986), Flaming & Courtney (1984), Shavelson and Bolus (1982), Byrne and Shavelson (1987).

Further, the research studies in self-concept conducted on formal students come out with the fact that the general/global self-concept was weakly correlated with academic achievement and confirmed the higher correlation between the academic self-concept and academic performance (Marsh and Parker, 1984; Shavelson and Bolus, 1982; Hansford and Hattie, 1982; Mc Cabe, 1992; Marsh, 1993; Saraswat, 1982; Radha Rani, 1983; Bachman, 1970; Byrne, 1984; Marsh, *et al.* 1985). Moreover, achievement in particular content areas to be mostly correlated with self-concept in the matching content areas (Marsh, *et al.* 1985).

Need of the Study

Research in student outcomes in distance education emphasized to learner characteristics as related to success in distance education. Distance learning is basically an individual centered system in which the curriculum, policies, methodology, evaluation system, media and communication all strive to maximize the individual learner's satisfaction and success. What kind of distance learners enter the system, therefore, happens to be an issue of crucial importance for the success and effectiveness of the entire system. Further, Panda and others expressed that ".... The learner is the axes around the system revolves; and research and development helps to understand the learner more and makes the revolving smoother" (Panda *et al.* 1996).

In view of the importance of learner characteristics in the success of system, an attempt has been made to study the academic self-concept of the distance learners' and its relation with the academic performance with a focus to provide certain suggestions to improve the performance of the distance learners.

Objectives of the Study

The objectives of the study are :

i) *explore the patterns of academic self-concept among distance learners of Delhi and adjoining areas at first degree level.*

ii) *Study the significance of differences in the academic self-concepts of first-degree level distance learners differing in certain background variables.*

iii) *study the relationship of academic self-concept with academic performance of distance learners at first-degree level.*

Hypothesis

i) *The following hypothesis were made :*

ii) *First degree level distance learners may be found to exhibit varying patterns of*

academic self-concept as per their background variables.

iii) *First degree level distance learners differ significantly in their academic self-concept according to their varying backgrounds.*

iv) *There exists significant positive relationship between academic self-concept and academic performance of distance learners at first degree level.*

Methodology

In order to achieve the above objectives, normative survey method was used for investigating the relationship between academic self-concept and academic performance of distance learners at first-degree level.

The Sample : The population for the present study was identified as the distance learners who were undergoing the Bachelors' Degree Programme (BDP) of the IGNOU Regional Centre, Delhi. The population was further limited to the final year BDP (Arts and Commerce Stream) learners who had applied for the term end examination conducted in the month of December, 1994. As per the address list provided by the computer centre of the IGNOU Regional Centre, Delhi, there were about 760 distance learners (B.A. and B.Com. stream only) applied for the term end examination conducted in December, 1994. It was decided to contact all the subjects covering the entire population. The responding subjects were considered as a random lot of candidates for inclusion in the sample. The final sample for the present study consists of 318 distance learners of the IGNOU Regional Centre, Delhi.

Tools Used : For the study, academic self-concept has been defined, as the experience of one's own as far as the academic concerns are involved. As there was no tool available to measure the academic self-concept of the distance learners, the investigator developed an academic self-concept scale. (Kumar, 1998).

The investigator scanned several such scales developed by Indian and foreign authors. A collection of 71 items was selected which were seems to be appropriate for including in the preliminary form of the five point rating scale. The items were tried out on a small sample of distance learners of IGNOU. The item analysis was carried out to screen out better kind of items. After the item analysis only 40 statements were included in the final form of the Academic Self-concept Scale. Each statement was associated with five possibilities of responses viz., Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree. A weightage of 5, 4, 3, 2, and 1 were given for a positive item and 1, 2, 3, 4, and 5 were given to a negative item. The maximum possible score on the scale was 200. Validity and reliability were established through the standard procedures. A raw

score norm was also developed to interpret the data. Scores ranging from 161-200 were classified as 'High' Academic Self-concept. Similarly the scores ranging from 121-160, 81-120, 41-80 and 1-40 were classified as 'Above Average', 'Average', 'Below Average' and 'Low' Academic Self-concept. The developed scale namely, 'Kumar's Scale for measuring Distance Learners' Academic Self-Concept' is given in Appendix-1.

Data Collection and Analysis

The Academic Self-concept Scale developed was sent to all the 760 distance learners by mail. With a number of repeated remainders, only 318 learners were sent back the filled in tool.

Simple percentage was used to analyze the data. Further the analysis of the data was made on the following ten background characteristics of learners : (i) Sex, (ii) Age, (iii) Marital Status, (iv) Locale, (v) Social Class, (vi) Academic Stream, (vii) Educational Level, (viii) Employment Status, (ix) Experience in Distance Learning and (x) Discontinuity in Studies. The main findings of the study can be submitted in the following heads :

Findings

The pattern of academic self-concept for the total sample and the sub-samples formed on the basis of background characteristics of learners has been presented below. In order to test the first hypothesis formulated, means and SDs were calculated separately for the total sample and sub-samples commensurate with the background variables for the test scores of academic self-concept.

(i) Nature of Academic Self-concept for Total Sample : Means and SDs were calculated and were compared with the norms for knowing the nature of Academic Self-concept of 318 sampled distance learners. The data in this regard is presented in Table 1.

Table 1 : Mean Scores and SDs on Academic Self-concept of Total Sample

Variable	Number of Learners	Mean	S.D.
ASC	318	136.96	19.90

Table 1 shows that the mean of raw score on the Academic Self-concept for the total sample was 136.96 with a S.D. of 19.90. On comparing the mean scores with the raw score norms developed, it was noticed that the academic self-concept of first

degree level distance learners was 'above average'. In other words, the sampled distance learners appear to possess academic self-concept tilted towards positive side.

(ii) Nature of the Distribution for Academic Self-concept in Sub-Samples : Sub-samples were formed on the basis of ten background characteristics, i.e., sex, age, marital status, locale, social class, academic stream, educational level, employment status, experience in distance learning and discontinuity in studies. Each of these sub-samples was further classified into dichotomous categories. The means and SDs for Academic Self-concept (ASC) was calculated separately for each of these sub-samples and have been presented in table 2.

Table 2 : Mean Scores and SDs on ASC Calculated for Different Sub-Groups

Category	Group	N	Mean	S.D.
Sex	Male	215	136.83	20.23
	Female	103	137.24	19.31
Age	Below 25 yr.	93	138.77	19.15
	25 and above yr.	225	136.21	20.20
Marital Status	Married	162	139.02	20.12
	Unmarried	156	134.83	19.51
Locale	Urban	249	137.45	20.30
	Rural	69	135.21	18.45
Social Class	SC/ST	61	136.56	20.86
	Non SC/ST	257	137.06	19.71
Academic Stream	B.A.	258	138.21	19.73
	B.Com.	60	131.62	19.93
Educational Level	+2	152	137.58	20.19
	Non+2	166	136.41	19.69
Employment Status	Employed	190	134.91	21.05
	Unemployed	128	140.02	17.72
Experience in Distance Learning	Experienced	63	139.75	22.17
	No Experience	255	136.28	19.29
Discontinuity in Studies	1-2 years	150	136.51	21.42
	More than 2 yrs.	168	137.37	18.50

A perusal of table 2 reveal that the mean scores on academic self-concept ranged from 131.62 to 140.02. When compared with the norms, the whole range falls

in the category of 'above average' (121-160). The range of corresponding SDs was from 17.72 to 22.17. It can, therefore, safely be concluded that the first-degree distance learners varying in certain background variables do possess a varying degree of academic self-concept. Yet, not changing the broader category of 'above average' in academic self-concept.

The distribution of Academic Self-concept for total sample and for sub-samples on the basis of ten background variables have been presented and discussed. It seems worth nothing that the variation in sub-groups are seen but do not go far away from the indices obtained for the total sample. On the basis of the above findings, it may be said that the hypothesis first stands accepted. These means and SDs have been put to use for comparison purposes.

(iii) Significance of Difference in Academic Self-concept of First Degree Distance Learners Varying in Certain Background Characteristics : In pursuance of the second objective of the study i.e., a comparative study of the characteristics, namely, academic self-concept possessed by distance learners, at first degree level, varying in their backgrounds was undertaken.

The obtained mean scores, SDs and CR values for academic self-concept for pairs under ten background variables were computed and these have been reported in Table 3.

Table 3 : Significance of Difference in Academic Self-concept of First Degree Distance Learners of Varying Backgrounds

Category	Group	N	Mean	S.D.	C.R.
Sex	Male	215	136.83	20.23	0.17
	Female	103	137.24	19.31	
Age	Below 25 yrs.	93	138.77	19.15	1.04
	25 and above yrs.	225	136.21	20.20	
Marital Status	Married	162	139.02	20.12	1.88
	Unmarried	156	134.83	19.51	
Locale	Urban	249	137.45	20.30	0.83
	Rural	69	135.21	18.45	
Social Class	SC/ST	61	136.56	20.86	0.18
	Non SC/ST	257	137.06	19.71	
Academic Stream	B.A.	258	138.21	19.73	2.33*
	B.Com.	60	131.62	19.93	

Category	Group	N	Mean	S.D.	C.R.
Educational Level	+2	152	137.58	20.19	0.53
	Non+2	166	136.41	19.69	
Employment Status	Employed	190	134.91	21.05	2.27*
	Unemployed	128	140.02	17.72	
Experience in Distance Learning	Experienced	63	139.75	22.17	1.24
	No Experience	255	136.28	19.29	
Discontinuity in Studies	1-2 years	150	136.51	21.42	0.39
	More than 2 yrs.	168	137.37	18.50	

• Significant at 0.05 level of confidence

It may be noted from table 3 that the C.R. values for the sub-groups pertaining to academic stream and employment status were obtained to be 2.33 and 2.27 respectively, which were found to be significant at 0.05 level of confidence. The other C.Rs were much below 1.96 and hence may be treated as insignificant. Further, the means of academic self-concept recorded for B.A. and B.Com. distance learners were 138.21 and 131.62 respectively and also the means of academic self-concept for employed and unemployed distance learners were noted to be 134.91 and 140.02 respectively.

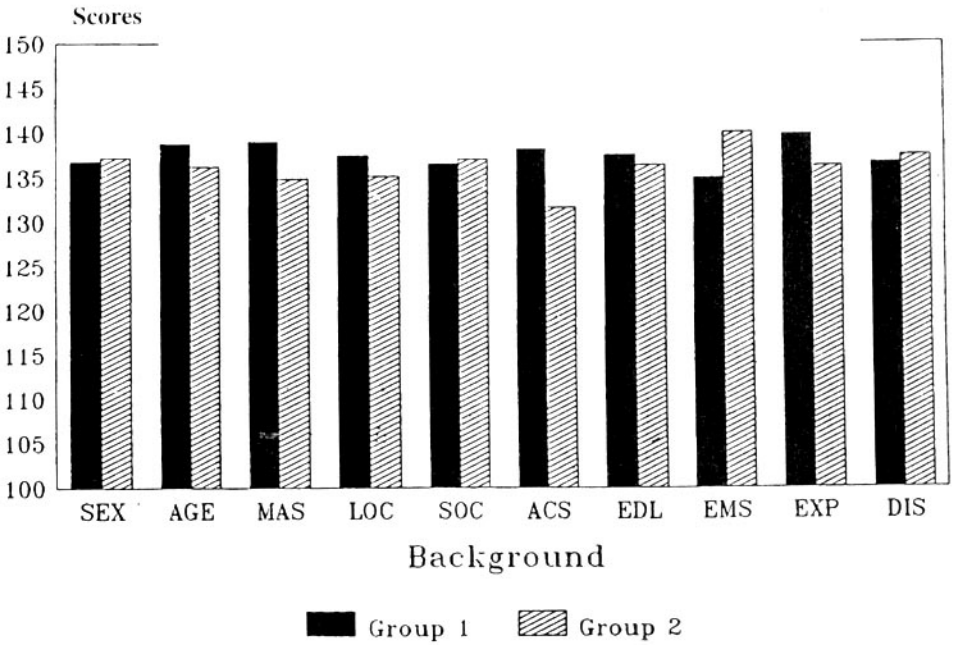
It seems fair to assert that the B.A. distance learners and unemployed distance learners possessed significantly higher academic self-concepts as against their B.Com. and employed counterpart distance learners respectively. May be the arts learners and the employed ones have switched over to distance mode of education having faced some of the real life problems which might have induced in them an urge of self-demonstration ; and that should have helped them to develop higher academic self-concepts.

Thus the second hypothesis was found to hold good only for the background variables of academic stream and employment status of first degree level distance learners.

For the remaining eight background variables, namely, sex, age, marital status, locale, social class, educational level, experience in distance learning and discontinuity in studies, the hypothesis 3 stands rejected. In other words, we may say that the first-degree level distance learners did not differ significantly in their academic self-concept vis-a-vis these eight background variables. The above results have also been depicted through a bar diagram (Fig. 1)

(iv) Correlates of Academic Performance of Distance Learners : This part of analysis has been devoted to the study of relationship between the independent variable, namely, academic self-concept with dependent variable academic performance of first

Figure 1 : Bar diagram showing the Academic Self–concept of Distance Learners Varying in Different Background Variables



degree level distance learners. As such, it meets the requirements of the objectives 3.

In pursuance of the above mentioned objective, data were gathered only for the distance learners enrolled during 1991 with a view to assessing the impact of three years of study on academic performance of distance learners. Further the availability of scores on corresponding sets of variables restricted the total number of subjects to 181.

In order to study the relationship between academic performance and academic self-concept, Pearsons' Product Moment Correlation was computed. The obtained result is summarized in Table 4.

Table 4 : Coefficient of Correlation between Academic Performance and Academic Self-concept

Variable	N	Coefficient of Correlation [r]
Academic self-concept Vs Academic Performance	181	0.4714**

** Significant at 0.01 level

It may be noted from the above table that the coefficient of correlation between academic self-concept and academic performance was recorded to be 0.4714. It represents moderate positive correlation between the variables. Thus the hypothesis 3 seems to hold true.

The above results indicate that the academic performance depends on the academic self-concept of first-degree distance learners. As the coefficient of correlation should be interpreted to show only the inter-dependence and not the causation as such, the findings should be considered as indicative only.

Incidentally the results of the study some of the studies conducted by Marsh (1993), Mc Cabe (1992), Marsh and Parker (1984), Bolus (1984), Radha Rani (1983), Saraswat (1982) and Shavelson and Buoch (1982) reported a positive and high correlation of academic self-concept with academic achievement of formal students.

Implications of the Study

The findings of the study reveals that there exists a moderate positive and significant correlation between academic performance and academic self-concept of first-degree distance learners. This highlights the need of enhancing the academic

self-concept and building up a positive academic self-concept of distance learners for better academic performance. The following interventions may be positively contributing in this direction :

(i) **Institutional Level Intervention :** The clientele for distance learning programmes are normally mature adults. As such, enhancing the academic self-concept of learners have certain limitations. However, at the study centres, the counselling sessions provided by the institution can play a major role in enhancing academic self-concept through developing self-confidence among their learners. In fact, this becomes an additional work for the respective academic counsellors working in the study centres. The inter-personal communication between the learner and the counsellor must focus on building positive self-concept of learners. The instructional system adopted (both print and other media) also should provide a healthy environment so that the learner may feel relax in his/her studies.

(ii) **Learner Initiative :** Academic self-confidence may be allowed to boom among distance learners by providing opportunities for more and more participation of learners in various academic activities during contact programmes at the study centres. For this a good rapport between the counsellors and the learners is of paramount importance. The human relationship based on the behaviour and conduct displayed by faculty may have far reaching affect on the tendency of learners for their involvement and participation. If it is encouraged chances of increased academic self-concept are most likely which may in turn be instrumental in enhancing academic performance of learners.

Kumar's Scale For Measuring Distance Learners' Academic Self-Concept

(S.A : Strongly Agree, A : Agree, UD : Undecided, D : Disagree, SD : Strongly Disagree)

☐ The course I joined is in accordance with my capabilities.	SA A UD D SD
☐ My friends always call me a duffer (budhu).	SA A UD D SD
☐ I forget the things immediately after which I have learnt it.	SA A UD D SD
☐ I possess ability to succeed in higher education.	SA A UD D SD
☐ I am not able to study with full concentration yet.	SA A UD D SD
☐ I have no interest in studying certain subjects.	SA A UD D SD
☐ I work very hard in my studies.	SA A UD D SD
☐ From my school days itself I have been very weak in studies.	SA A UD D SD
☐ I feel irritating when I open my books for studying.	SA A UD D SD
☐ I cannot progress in learning as I do not possess the pre-requisities.	SA A UD D SD
☐ I do not want to hide my academic weakness to friends and teachers.	SA A UD D SD
☐ I always plan about my studies.	SA A UD D SD
☐ I get less time for studies.	SA A UD D SD
☐ I am not able to do my homework and assignments in time.	SA A UD D SD
☐ I spend a lot of time in library for study purpose.	SA A UD D SD
☐ I feel difficulty in sparing time for studies at home.	SA A UD D SD
☐ I am over-burdened with my academic work.	SA A UD D SD
☐ I do my work in advance.	SA A UD D SD
☐ I have not yet learned the good technique of study	SA A UD D SD
☐ I appear in the examination without sufficient preparation.	SA A UD D SD
☐ I think I am not getting proper guidance in my studies.	SA A UD D SD
☐ I hope I shall complete the course within the minimum possible period.	SA A UD D SD
☐ I may not be able to complete my course successfully.	SA A UD D SD
☐ I am very optimistic towards my studies.	SA A UD D SD
☐ I think I can pass the course easily.	SA A UD D SD
☐ After completing the course, I have very bright prospects.	SA A UD D SD
☐ I spend much of the time worrying over the future.	SA A UD D SD
☐ I am confident of getting good grade in my examination.	SA A UD D SD

☐ I am not afraid of competition.	SA	A	UD	D	SD
☐ I am very much worried about the examination.	SA	A	UD	D	SD
☐ Self-study method is very suitable to me.	SA	A	UD	D	SD
☐ Teachers teaching during contact programmes do not impress me.	SA	A	UD	D	SD
☐ I have to leave my studies and start a vocation because of my family conditions.	SA	A	UD	D	SD
☐ I give more importance to my studies than any other work.	SA	A	UD	D	SD
☐ I think I could study better in regular class.	SA	A	UD	D	SD
☐ I have joined the course just for getting one more degree.	SA	A	UD	D	SD
☐ I think discontinuity in my study is making a lot of problems to study now.	SA	A	UD	D	SD
☐ I feel very loneliness in my studies through distance mode.	SA	A	UD	D	SD
☐ I think distance mode of education is not suitable for me.	SA	A	UD	D	SD
☐ I am always delayed in sending my assignments.	SA	A	UD	D	SD

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