Relative importance of independent variables in predicting educational perspectives of students of Dr. Babasaheb Ambedkar Open University

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Abstract:
A study was conducted in five tribal districts of Gujarat state with 160 respondents students of Dr. Babasaheb Ambedkar Open University. The result revealed that slightly less than two third (65.62%) of the respondents had medium level of educational perspectives of Dr. Babasaheb Ambedkar Open University education, whereas 17.50 per cent and 16.88 per cent had high and low level of educational perspectives toward Dr. Babasaheb Ambedkar Open University education. The independent variables such as in reading habit, caste, overall modernity and birth order contributed 75.50 per cent variation in extent of educational perspectives.

Keywords: *Educational perspectives, Reading habit, Caste, Overall modernity, Birth order*

1. Introduction

Distance Education (DE) is now well recognized mode of education. In a short time, Distance Education methodology has attained a level where any type of knowledge or skill can be taught quite effectively through this mode. The distance mode of education has essentially grown out of mode communication technologies. Distance Education through correspondence course, more on the line of traditional graduate and postgraduate programmes, in arts, commerce and education started in the late 60s and early 70s. This was mainly in response to the needs of persons who were either employed or who could not attend regular day scholar programmes or could not get admission in universities and colleges. With the establishment of open universities, there is going to be qualitative change in the situation because the media approach, and the multimedia approach, and the modern technologies have played an important role in them. Educational perspectives are important because they guide how we think and act as teachers. An educational perspective is a cluster of actions, intentions and beliefs. Actions are the manifest aspects of teaching: how a teacher organizes a class, course, or curriculum, how s/he uses teaching materials, the teaching methods or techniques employed. Intentions encompass more than just detailed learning objectives; they are closely tied to what the teacher sees as the purpose or function of his or her teaching. There are host of factors which decides educational perspectives on the part of management as well as clients. Therefore, it is necessary to know the relative contribution of profile of the students which determines the overall educational perspectives. Keeping in view a study entitled relative importance of independent variables in predicting educational perspectives of students of Dr. Babasaheb Ambedkar Open University was carried out with following objectives:

(1) To study the overall educational perspectives of students of Dr. Babasaheb Ambedkar Open University.
(2) To study the relative contribution of the profile of the students in determining educational perspectives of Dr. Babasaheb Ambedkar Open University.

2. Materials and Methods

The present study was concluded in five tribal districts of Gujarat state having the highest numbers of students enrolled in Dr. Babasaheb Ambedkar Open University for the academic year 2006-07.

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Propionates randomly sampling technique was used to select 160 respondents @ of 5.00 per cent from enrolled 3250 students.

Data were collected with the help of well-structured pretested Gujarati version interview schedule. The collected data were analyzed in light of the objectives with appropriate statistical tools viz., percent, stepwise regression and standard deviation.

3. Results
Overall educational perspectives of Dr. Babasaheb Ambedkar Open University as perceived by the students

Educational perspectives play an important role in guiding the students towards thinking. It is a cluster approach of action, intension and belief. The distribution of the respondents according to their level of educational perspectives is presented in Table 1 and depicted in Fig. 1.

Table 1: Distribution of the respondents according to their level of educational perspectives

n=160

Sr. No.	Level of educational perspectives	Number	Percent
1.	Low level (below 52.60)	27	16.88
2.	Medium level (in between 52.61 to 102.02)	105	65.62
3.	High level (above 102.03)	28	17.50
	Mean : 77.31 SD : 24.71		
Total		160	100.00

It is evident from the Table 1 that slightly less than two third (65.62%) of the respondents had medium level of   educational perspectives of Dr. Babasaheb Ambedkar Open University education, whereas 17.50 per cent and 16.88 per cent had high and low level of educational perspectives toward Dr. Babasaheb Ambedkar Open University education.

Relative importance of independent variables in predicting educational perspectives of students of Dr. Babasaheb Ambedkar Open University

Generally, in behavioral science no dependent variable can influence by any single independent variable. As such the extent of educational perspectives is in reality, not influenced by any of the independent variables singly. It is found to be influenced by more than one of these independent attributes jointly through their reciprocal and interactive relationship. In order to assess the contribution (Influence) of each independent variable to the dependent variable, the effect of other was held constant.

Efroymsons (1962) stated that stepwise regression is one such method which has been widely adopted in multiple regression analysis. It has got the added advantage that at each stage of analysis every variable is subjected to an examination for its predictive value. The stepwise regression was carried out with the help of computer. The results are presented in   Table 2 and illustrated in Fig. 1.

Table 2: Step-wise multiple regression analysis educational perspectives of Dr. Babasaheb Ambedkar Open University

Sr. No.	Independent variable	Multiple co-relation co-efficient (R)	Co-efficient of Determination (R^2)	'F' values	Partial regression co-efficient (b)	't' value	Standard partial regression co-efficient (SPRC)	Rank
1.	Reading habit	0.648	0.421 (42.10)	114.66	3.072	6.965	0.333	I
2.	Caste	0.781	0.609 (60.90)	122.50	-7.192	-7.655	-0.323	II
3.	Overall modernity	0.833	0.694 (69.40)	117.84	0.823	6.198	0.289	III
4.	Birth order	0.869	0.755 (75.50)	119.14	5.259	6.194	0.288	IV

**Significant at 0.01 level of probability; $R^2 = 0.776$
Figures in parenthesis show percentage.

The content of the Table 2 revealed that the variables were introduced stepwise in succession depending upon the contribution of each of the independent variable in explaining the variation in the dependent variable.

The multiple regressions co-efficient (R) represents the correlation between the dependent variable's actual score and the predicted score obtained from the filled multiple regression equation. The co-efficient of multiple determinations (R^2) gives the average amount of change in dependent variable when all independent variables were taken together and was tested with 'F' test for its significance.

Partial regression co-efficient (b) represents the change in dependent variable for a unit change in independent variable and it was tested with 't' test for its significances.

The various independent variables had their own unit of measurement, which did not permit a comparison of the partial 'b' values. To facilitate the comparison, the partial 'b' values were converted into standard partial 'b' values which were free from the unit of measurement.

The independent variables were ranked on the basis of standard partial 'b' values to find out their relative importance in predicting the dependent variable.

From the Table 2 and Fig. 1, it can be observed that out of 14 independent variables only 4 variables were exerting influence on the extent of education perspectives of   Dr. Babasaheb Ambedkar Open University students. All the four variables together were contributing 75.50 per cent variation as indicated by (R^2) value for the extent of educational perspectives.
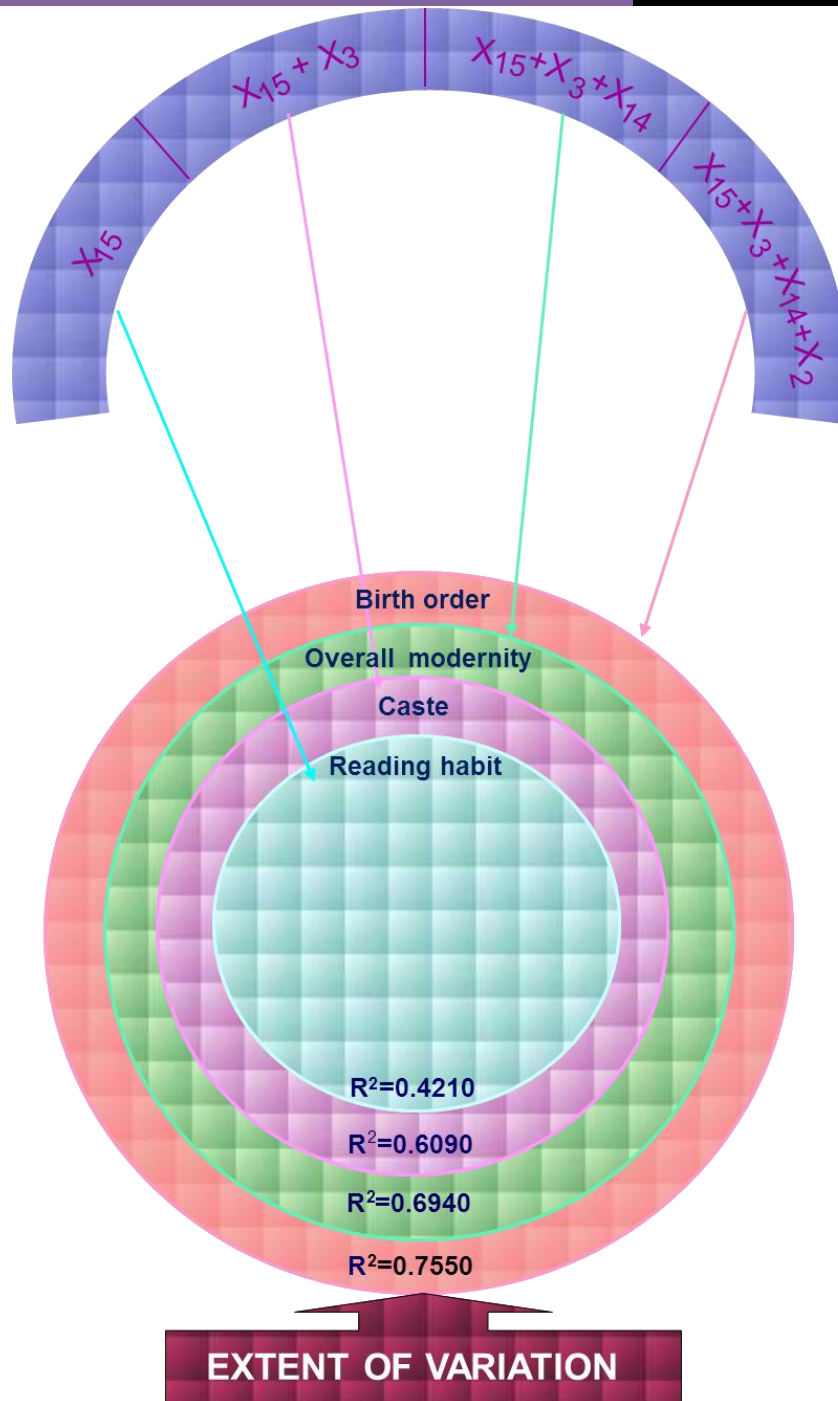
Fig. 1 : Extent of variation explained by the independent variables on educational perspectives

It can be inferred that 42.90 per cent variation in educational perspectives is contributed by reading habit of the students. However, reading habit + caste accounted for 60.90 per cent; overall modernity + reading habit + caste accounted for 69.40 per cent and birth order + reading habit + caste + overall modernity accounted for 75.50 per cent change in dependent variable. The R^2 values at each stage of step up regression were found to be significant at 0.01 level of probability. Contribution of all the variables included in the study was found to be 77.60 per cent as overall R^2 was 0.776.

The partial 'b' values of these four variables were converted into standard partial 'b' values which were 0.333 for reading habit, -0.323 for caste, 0.289 for overall modernity and 0.288 for birth order. The 't' values for partial 'b' were significant at 0.01 level in case of all the four independent variables.

According to the values of standard partial 'b' from the highest to lowest, the rank order were given first to reading habit, second to caste, third to overall modernity and fourth to birth order.

It can be inferred from the above results that the independent variables such as in reading habit, caste, overall modernity and birth order contributed 75.50 per cent variation in extent of educational perspectives. The findings are suggestive of the fact that the variables which influenced the educational perspectives should be reckoned while making any policy decision to improve comprehensive working of Dr. Babasaheb Ambedkar Open University.

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