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Correlates of the Achievement in Business
Management Course,

By

S. Chatterji, Manjula Mukerjee and Subir Kumar Mitra*

Introduction

One of the current problems in connection with the course in management and business administration, is developing suitable admission criterion. Recently there is a rush for management training among the graduates in our country. Candidates from all branches of education viz., Engineering, Science, Humanities are coming for enrollment in management courses. To meet this demand recently many institutions and universities have inaugurated business management courses. Each year at the time of admission these institutions and universities are facing the problem of selecting suitable candidates from among a large number of applicants. Some of the institutions use aptitude tests developed in foreign countries for screening the candidates; some have developed their own selection test battery. Most of these institutions consider the academic background, interview ratings etc., along with the aptitude scores. The purpose of this study was to investigate the relationship of relevant background variables, the scores on aptitude tests etc., to the achievement in the business management course conducted by an institution.

*All authors are from Indian Statistical Institute, Calcutta, (Psychometric Unit).
The first author is the Head of the Unit.

Variables

The background variables investigated were (a) age (b) work experience (c) the divisions obtained in the Higher Secondary Examination (d) branches of their education viz., Science, Arts, Commerce, Engineering etc, (e) the interview marks and (f) the composite of the aptitude scores etc.

The criterion was the grade-point-average obtained at the end of the course and this was based on the performance of the students during the two years' period of the course.

Subjects

The subjects of investigation were students enrolled in two different sessions viz., 67-69 and 68-70. There were 77 and 97 students in the two groups.

Procedure and Results

The analysis of the data was done in two stages. The procedure and the results are presented below :

(A) Comparison of the means of the criterion for students classified according to background variables.

The students enrolled in both the sessions were divided into several groups according to

- (i) division—first, second and third obtained in the Higher Secondary examination or equivalent examination.
- (ii) age—20 years or below (low group), between 21 to 23 years (average group), 24 years and above (high group).
- (iii) branches of education—Science, Arts, Commerce and Engineering.
- (iv) interview score—high, average, low. This grouping was done by

converting the raw scores into Stanine grades first. Students getting statines 7, 8, 9 were put in high group. Those getting 4, 5, 6 grades were put in average group while students obtaining 1, 2, 3 grades were classified as low group.

- (v) aptitude score—high, average and low on the basis of the composite of the aptitude scores. This grouping was done by following similar procedure which is described above.

Now the mean values of the CGPA i.e., the cumulative grade point average were obtained separately for the groups described above. The difference in the corresponding mean values were tested by applying usual t-test. The means and the t-values for the students classified on the basis of the background variables are presented in tables 1A, 1B, 2A, 2B etc., in appendix A.

From the figures presented in tables 1A and 1B it follows that the means of CGPA of the students who passed the Higher Secondary Examination in first division were higher than the corresponding means of the students who passed in second division. The obtained result was a bit different in case of the students who passed in third division. But the number of cases was too small in that particular group to derive any definite conclusion.

It is evident from the values presented in tables 2A, 2B that the mean of CGPA was lowest for the students in average age group. The means for the high and low groups though different were not significantly so and hence, it can be said that the age of the students at the time of enrollment was not related to their performance in the course.

The figures presented in tables 3A and 3B show that among all the mean values of the CGPA, the mean for the Engineering students was the highest and this mean was significantly higher than those for the Science, Arts and Commerce students. Same results was obtained in both the years.

It follows from tables 4A and 4B that though the mean of the CGPA for the students having work experience was higher than that

obtained for the students having no work experience, yet the difference was not significant. This was true for both the groups. So it can be concluded that work experience could not promote the students towards better performance in the management course.

It follows from tables 5A and 5B that there was no difference in means of the CGPA of the students classified on the basis of interview results. Though the difference was not significant yet it may be noted that the mean of the group rated as low on the basis of interview was highest.

From the results presented in tables 6A and 6B it follows that the aptitude score was the most effective among all the variables in selecting better group of students at the time of admission. It was observed that the higher the aptitude score the higher was the mean of the CGPA and the increase in mean values were significant in most of the cases.

(B) Probabilities of success in the management course.

By analysing the nature of the final results of the course it was observed that about 98 or 99 per cent of the students usually get through the final examination. So instead of considering 5.0 which was the mean value of the CGPA necessary for passing the course, 6.0 was taken as the cutting point for dividing the students into two groups - successful and unsuccessful because after consulting some of the faculty members of the course it was understood that those who obtained 6.0 in the CGPA might be considered as those who passed the course with ease. Next the percentage of the students getting CGPA equal to or greater than 6.0 were obtained for the groups separated on the basis of the six background variables. The results obtained are presented in tables 7 and 8 presented in Appendix A.

The figures obtained in these tables more or less supported the results already obtained by analysing the mean values of CGPA for different groups. There was a consistent increase in the percentage of success along with the division in the Higher Secondary examination,

except in one case where the number of students involved was considerably low. The increase in the percentage of success was irregular in case of age groups and interview grades. Engineers usually had a high percentage of success in both sessions though in one session the Commerce students secured a percentage of success as high as .53. No significant change in the percentage of success was observed by dividing the students on the basis of work experience. The aptitude score was highly related with the CGPA because, as the aptitude score increased the percentage of pass in the course also consistently increased. This was true for both the sessions.

Conclusion

Observing the relations of different background variables considered at the time of admission in a management course, to the final results of the students at the end of the course for two successive sessions, it was evident that out of the six variables viz., age, branches of education, division obtained in the Higher Secondary or equivalent examination, interview marks, aptitude scores and work experience, only two variables were positively (significant) related to the performance. These were the branches of education and aptitude scores.

The performance of the engineering students was consistently better than the other groups of students and the aptitude score had a consistent positive relation with the final cumulative grade point average of the course. Moreover, one point should be mentioned that though the students were classified into High, Average and Low groups on the basis of aptitude scores these groupings were based on the selected group. Those who obtained stanines 1, 2 and 3 with respect to the entire group of applicants were not selected. Hence the selected groups were homogenous with respect to the aptitude scores. Consequently the estimate of the relation of the aptitude scores and the performance in the course was an underestimate. Higher degree of positive relation may be actually present between these two variables.

Table-1 A

SHOWING THE MEANS OF CGPA OF THE STUDENTS
CLASSIFIED ON THE BASIS OF DIVISION OBTAINED
IN H. S. OR EQUIVALENT EXAMINATION

Session	I division		II division		III division	
	Mean	N	Mean	N	Mean	N
1967-69	5.95	41	5.54	29	5.99	3
1968-70	5.85	62	5.50	28	5.25	4

Table-1 B

t-VALUES OBTAINED TO TEST THE SIGNIFICANCE
OF THE DIFFERENCE IN MEANS

Session	Between	Between	Between
	I div. x II div.	I div. x III div.	II div. x III div.
1967-69	2.55*	0.12	1.40
1968-70	1.91	1.73	0.68

Table-2 A

SHOWING THE MEANS OF CGPA OF THE STUDENTS
CLASSIFIED AGEWISE

Session	High (24 years)		Average (21-23 yrs.)		Low (20 yrs.)	
	Mean	N	Mean	N	Mean	N
1967-69	5.74	15	5.74	43	5.82	19
1968-70	5.93	17	5.63	61	5.82	18

Table—2 B

t-VALUES OBTAINED TO TEST THE SIGNIFICANCE
OF THE DIFFERENCE IN MEANS

Session	Between High x Average	Between High x Low	Between Average x Low
1967-69	0.01	0.36	0.40
1968-70	1.29	0.47	0.89

Table—3 A

SHOWING THE MEANS OF CGPA OF THE STUDENTS
CLASSIFIED ON THE BASIS OF THE BRANCHES
OF EDUCATION

Session	Science		Commerce		Arts		Science	
	Mean	N	Mean	N	Mean	N	Mean	N
1967-69	5.60	31	5.66	13	5.49	17	6.60	20
1968-70	5.50	28	5.30	11	5.16	12	6.09	50

Table—3 B

t VALUES OBTAINED IN TESTING SIGNIFICANCE
OF THE DIFFERENCE IN MEANS

Session	Between ScxArt	Between ScxCom	Between ScxEng	Between ArtxCom	Between EngxArt	Between EngxCom
1967-69	0.60	0.12	2.08*	0.33	2.40	0.76
1968-70	1.70	0.28	3.52*	0.49	5.25**	2.95

Table—4 A

SHOWING THE MEANS OF CGPA OF THE STUDENTS
CLASSIFIED ON THE BASIS OF WORK EXPERIENCE

Session	Having work experience		Having no work experience	
	Mean	N	Mean	N
1967-69	5.95	21	5.70	55
1968-70	5.62	33	5.78	63

Table—4 B

t VALUES OBTAINED IN TESTING THE SIGNIFICANCE
OF THE DIFFERENCE IN MEANS

Session	Between work Experience x No Experience
1967-69	1.30
1968-70	0.87

Table—5 A

SHOWING THE MEANS OF CGPA OF THE STUDENTS
CLASSIFIED ON THE BASIS OF INTERVIEW SCORES

Session	High interview Score		Average interview Score		Low interview Score	
	Mean	N	Mean	N	Mean	N
1968-70	5.79	56	5.51	22	5.80	18

Table—5 B

t-VALUES OBTAINED IN TESTING THE SIGNIFICANCE
OF THE DIFFERENCE IN MEANS

Session	Between High x Average	Between High x Low	Between Average x Low
1967-69	1.30	0.40	1.16

Table—6 A

SHOWING THE MEANS OF CGPA OF THE STUDENTS
CLASSIFIED ON THE BASIS OF APTITUDE SCORES

Session	High Aptitude Score		Average Aptitude Score		Low Aptitude Score	
	Mean	N	Mean	N	Mean	N
1967-69	6.13	25	5.79	26	5.44	27
1968-70	6.35	21	5.68	41	5.40	33

Table—6 B

t VALUES OBTAINED IN TESTING SIGNIFICANCE
OF THE DIFFERENCE IN MEANS

Session	Between High x Average	Between High x Low	Between Average x Low
1967-69	1.62	3.47**	2.21*
1968-70	3.99**	4.98**	1.72

Table—7

SHOWING THE PERCENTAGES OF THE STUDENTS PASSING THE COURSE WITH CGPA 6.0 GROUPS DIVIDED ON THE BASIS OF THE DIVISION IN H. S., AGE INTERVIEW SCORE AND COMPOSITE APTITUDE SCORE

Group	PERCENTAGE OF PASS							
	Div. in H.S. Session		Age Session		Interview Session		Aptitude Session	
	67-69	68-70	67-69	68-70	67-69	68-70	67-69	68-70
High/1 st Division	44	40	25	50	X	38	57	71
Average/2 nd Division	17	32	35	30	X	27	38	34
Low/3 rd Division	67	25	37	44	X	44	10	18

Table—8

SHOWING THE PERCENTAGE OF THE STUDENTS THE COURSE WITH CGPA 6.0 IN GROUPS DIVIDED ON THE BASIS OF BRANCHES EDUCATION AND WORK EXPERIENCE

Branches of Education	PERCENTAGE OF PASS					
	Session		Work Experience	Session		
	67-69	68-70		67-69	68-70	
Arts	25	10	With work experience	38	36	
Science	28	28				
Commerce	53	15	Without work experience	33	37	
Engineerin	40	52				