

Relationship Between the Selected Factors and Academic Achievement of Undergraduate Students of Punjab Agricultural University, Ludhiana

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ABSTRACT

The study was undertaken to know the factors affecting the academic achievement of undergraduate students of Punjab Agricultural University, Ludhiana. The study was conducted in the three constituent colleges of PAU, Ludhiana viz. College of Agriculture, College of Agricultural Engineering, and College of Home Science. The respondents were the students who were enrolled for graduation programme during the academic year 2002-03 and were in the final year of B.Sc. Agri. (Hons.), B. Tech (Agri. Engg.) and B.Sc. Home Sci. (Hons.). Majority of the students (41.91%) attained poor level of academic achievement. Family income did not influence the academic achievement of the students. There was significant and positive relationship between the living conditions of hostlers as well as day scholars and their academic achievement. The participation of students in co-curricular activities did not influence their academic achievement. The academic achievement was significantly affected in a positive manner by the study habits of students and the academic achievement was found to be independent of the level of adjustment in the college. In order to improve academic achievement, there should be more emphasis on practical work, discussion rather than dictation, more seminars and debates should be organized and internship should be introduced at the end of degree programme.

University is a centre of culture and academic excellence. It is a unique institution engaged in exploring, generating, and transmitting knowledge. In all probability, it calls for taking more responsibility for students than they have ever taken before. The people, they meet and live with may be quite different from those, they knew earlier.

Achievement is the competence which the students actually show in the subjects in which they have received instructions. The educational performance is not always dependent on intelligence, but there are many other factors also which determine their performance. These include financial difficulties, lack of interest in studies, study habits, parent's education and occupation, health conditions, adjustment in school/college environment, participation in co-curricular activities etc.

It is well realized that it is not only the intelligence that affects the academic achievement, but many other factors also affect the academic achievement. The present investigation was therefore, undertaken to establish the relationship between general background, health, living

conditions, adjustment in the college and participation in co-curricular activities with the academic achievement and get suggestions to improve the academic achievement. So keeping the above facts in view, the present study entitled, "Relationship between the selected factors and academic achievement of undergraduate students of Punjab Agricultural University, Ludhiana" was planned.

METHODOLOGY

The study was conducted in the three constituent colleges of Punjab Agricultural University, Ludhiana viz. College of Agriculture, College of Agricultural Engineering and College of Home Science situated at the main campus of the University. The respondents for the study were the students who were enrolled for four year graduation programme during the academic year 2002-2003 and were in the final year of B.Sc. Agri. (Hons.), B. Tech. (Agri. Engineering), and B.Sc. Home Science (Hons.) in the College of Agriculture, College of Agricultural Engineering, and College of Home Science respectively. There were 51 students in College of Agriculture, 47 in College of

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Agricultural Engineering and 27 in college of Home Science. Out of them, 8, 8 and 4 students were taken respectively for the pre-testing of the questionnaire. The remaining 43 from College of Agriculture, 39 from College of Agricultural Engineering and 23 from College of Home Science were finally selected for the present study. The list of students was obtained from the offices of the concerned Deans. The students were classified into three categories according to their academic achievement as poor, average and high in terms of their overall Credit Point Average (OCPA) out of 10.00.

RESULTS AND DISCUSSION

Relationship between the significant factors and academic achievement

1. Health Status

A close look at the data presented in Table 1 reveals, that majority (60.00%) of the students having poor health also performed poorly in the academic field. This percentage declined to 56.52 per cent in case of students who had average health and further to 27.78 per cent in case of those who had good health status. This shows that poor academic performance declines with the improvement in health status. This can also be seen in other way i.e. none of the students with poor health could attain high academic achievement while the proportion of students with high academic achievement increased with the improvement in health status i.e. from 15.22 per cent in case of average health status to 27.78 per cent in case of good health status students. The coefficient of correlation came to be 0.401 which was significant at one per cent level. This indicates that health status and academic achievement are significantly and positively associated.

These findings are similar to those of Goyal and Dhaliwal (1995) who found positive relationship between the academic achievement and health status while Bala (1982) reported negative and significant relationship

between the academic achievement and the health status of students.

2. Living Conditions of Hostlers

The data pertaining to distribution of hostlers have been presented in Table 1 which shows that no hostler with poor living conditions could attain high academic achievement while the proportion of hostlers having average and good academic achievement increased with the improvement in their living conditions i.e. from 12.00 per cent in case of average living conditions to 46.67 per cent in case of high living conditions. On the other hand, none of the hostlers having good living conditions had poor academic achievement. Majority (77.78%) of the hostlers having poor living conditions also performed poorly in the academic field. There was significant coefficient of correlation between academic achievement and living conditions of hostlers at 5 per cent level of significance (Table 2). This shows that academic achievement of hostlers was significantly related with their living conditions.

3. Living Conditions of Day Scholars

The data presented in Table 1 show that 100 per cent day scholars having poor living conditions performed poorly in the academic field while this problem declined to 64.29 and 48.00 per cent in case of day scholars having average and good living conditions respectively. On the other hand, none of the day scholars having poor living conditions could attain high academic achievement. This proportion of day scholars with high academic achievement increased from 7.14 per cent with average living conditions to 16.00 per cent with good living conditions. This indicates that academic achievement of day scholars had direct relationship with their living conditions. Coefficient of correlation $r = 0.189$ (Table 1), significant at 5 per cent level, reaffirm the positive and significant relationship between the academic achievement and the living conditions.

Table 1 : Relationship between the significant factors and academic achievement

Categories	Academic Achievement						Coefficient of correlation(r)	
	Poor		Average		High			
	No.	Percentage	No.	Percentage	No.	Percentage		
Health status	Poor	3	(60.00)	2	(0.00)	0	(0.00)	0.401 ***
	Average	26	(56.52)	13	(28.56)	7	(15.22)	
	Good	15	(27.78)	24	(44.44)	15	(27.78)	

Living Conditions of Hostlers	Poor	7	(77.78)	2	(22.22)	0	(0.00)	
	Average	14	(56.00)	8	(32.00)	3	(12.00)	0.195**
	High	0	(0.00)	16	(53.33)	14	(46.67)	
Living Conditions of Day Scholars	Poor	2	(100.00)	0	(0.00)	0	(0.00)	
	Average	9	(64.29)	4	(28.57)	1	(7.14)	0.189**
	Good	12	(48.00)	9	(36.00)	4	(16.00)	
Study Habits	Poor	4	(57.14)	3	(42.86)	0	(0.00)	
	Average	14	(43.75)	12	(37.50)	6	(18.75)	0.199**
	Good	26	(39.39)	24	(36.36)	16	(24.24)	

** Significant at 5% level *** Significant at 1 % level

These findings of the study are in agreement with those of Bhargava (1972), Bala (1982), Dhaliwal (1988) who had also reported positive and significant relationship between the academic achievement and living conditions.

4. Study Habits

A perusal of the data given in Table 1 points out that there was a direct relationship between the academic achievement and the study habits of the students. The proportion of students with poor academic achievement declined with the improvement in their study habits. It declined from 43.75 per cent with average study habits and further to 39.39 per cent with good study habits. On the other hand, none of the students, having poor study habits could attain high academic achievement while the proportion of students with high academic achievement increased from 18.75 per cent having average study habits to 24.24 per cent having good study habits. The coefficient of correlation worked at 0.199, significant of 5 per cent level, established that academic achievement was significantly influenced in the positive manner by the study habits of the students.

These findings are similar to those of Kaur (1981), Dhaliwal (1988), Dhawan (2000) who also found significant and positive relationship between the academic achievement and study habits of the students.

Relationship between non-significant factors and academic achievement

1. Family Income

A close perusal of the data given in Table 2 shows that 40 per cent of the students belonging to low income families had poor level of academic achievement. These proportions for medium and high income families came to be 50.00 per cent and 35.71 per cent respectively. As low as 28.89 per cent of the students belonging to low income

families had high level of academic achievement which declined to 15.63 per cent among the medium income families and further to 14.29 per cent among the high income families. However, there was a decline in the high academic achievement with the increase in income; but the decline was not significant as indicated by the non-significant value of the coefficient of correlation which was -0.083.

Bhargava (1972) had reported similar findings. These findings are in disagreement with those of Bala (1982) and Tiwari (2002) which showed significant affect of the family income on the academic achievement of students.

2. Participation in Co-curricular Activities

A critical examination of the data given in Table 2 indicates that the proportion of students with poor academic achievement increased with the increase in the level of their participation in extra-curricular activities, i.e. from 28.57 per cent with poor participation to 50.00 per cent with average participation and further to 57.14 per cent with good participation. The proportion of students with high academic achievement declined from 32.65 per cent with poor participation to 14.29 per cent with average participation and further to 7.14 per cent with good participation in co-curricular activities. The distribution of students according to the level of their participation in extra-curricular activities in relation to their academic achievement shows that participation in extra-curricular activities adversely affected the academic achievement of students. The coefficient of correlation (-0.172) had also proved this fact. But the inverse relationship between participation in extra-curricular activities and academic achievement was found statistically non-significant.

Bala (1982), Singh (2000) also found non-significant association between the academic achievement and participation in extra-curricular activities while, Dhaliwal (1988), Fish (2003) found significant association between

the academic achievement and the extra-curricular activities, thus, contradicting the findings of the present study.

3. Leisure Time Activities

A perusal of the data given in Table 2 indicates that there was no definite trend between the leisure time activities and the academic achievement of students. As much as 41.67 per cent of students with poor leisure time activities performed poorly in the academic activities. This proportion declined to 37.04 per cent with average leisure

time activities and further jumped to 48.72 per cent with good leisure time activities. The proportion having high academic achievement was 8.33 per cent of students with poor leisure time activities which increased to 29.63 per cent in case of average leisure time activities and declined to 12.82 per cent in case of more leisure time activities. This shows that leisure time activities did not exert significant affect on the academic achievement of students. The non-significant value of coefficient of correlation $r = -0.042$ (Table 2) had also confirmed these findings.

Table 2 : Relationship between non- significant factors and academic achievement

Categories	Academic Achievement						Coefficient of correlation(r)	
	Poor		Average		High			
	No.	Percentage	No.	Percentage	No.	Percentage		
Family Income	Low	18	(40.00)	14	(31.11)	13	(28.89)	-0.083 ^{NS}
	Medium	16	(50.00)	11	(34.38)	5	(15.63)	
	High	10	(35.71)	14	(50.00)	4	(14.29)	
Level of Participation in Co-curricular Activities	Poor	14	(28.57)	19	(38.78)	16	(32.65)	0.172 ^{NS}
	Average	14	(50.00)	10	(35.71)	4	(14.29)	
	Good	16	(57.14)	10	(35.71)	2	(7.14)	
Leisure-Time Activities	Less	5	(41.67)	6	(50.00)	1	(8.33)	-0.042 ^{NS}
	Average	20	(37.04)	18	(33.33)	16	(29.63)	
	More	12	(48.00)	9	(36.00)	4	(16.00)	
Adjustment in College	Poor	6	(46.15)	4	(30.77)	3	(23.08)	0.046 ^{NS}
	Average	10	(43.48)	9	(39.13)	4	(17.39)	
	Good	28	(40.58)	36	(37.68)	15	(21.74)	

NS = Non Significant

4. Adjustment in College

The data given in Table 3 did not depict any definite trend between the academic achievement of students and their adjustment in college. The proportion of students with poor academic achievement came to be 46.15, 43.48, and 40.58 per cent with poor, average and good adjustment in college respectively while on the other hand, the proportion of students with high academic achievement was 23.08, 17.39 and 21.74 per cent with poor, average and good adjustment in college respectively. The gap between the proportion was non-significant as indicated by the value of coefficient of correlation, $r = 0.046$. This may be due to its secondary role towards academic achievement.

The finding of the present study are in contradiction to those of Bala (1982) who reported significant relationship between academic achievement of students and their adjustment in college.

Suggestions given by students to improve academic achievement

The students were asked to suggest remedial measures to Improve their academic achievement. Their suggestions have been presented in Table 3. A perusal of the data given in the descending order in Table 4 shows that most common suggestions given by the students were that more emphasis should be laid on practical work than theoretical (97.14%), more emphasis on discussion than

dictation (81.9%), need of internship at the end of the degree (75.23%) and more seminars and debates should be organized (73.33%), syllabus should be updated regularly (67.61 %) and notes should be given before hand and there should be only discussion in the lass (60%).

Table 3. Distribution of students according to the suggestions given by them to improve their academic achievement

N=105		
Suggestions	No.	Percentage
There should be Internship at the end of the degree	79	75.23
More emphasis on practical work then theoretical	102	97.14
More discussion rather than dictation	86	81.90
Notes should be given before hand and there should be only discussion in the class	63	60
Syllabus should be updated regularly	71	67.61.
More seminars and debates should be organized	77	73.33

*Multiple Responses

These suggestions will go a long way in improving the academic achievements of students if they are implemented in true spirit.

CONCLUSION

Majority of the students attained poor level of academic achievement. Family income, participation in co-curricular activities, leisure time activities and adjustment in College did not influence the academic achievement. Health status and study habits influenced the academic achievement of students significantly in a positive direction. High level of academic achievement by the students with good health reaffirms that sound mind lives in a sound body. Thus, health of the students must be the focus in the academic field. Hostel provides congenial and suitable environment for studies as compared to the day scholars due to a number of reasons such as availability of library, sports fields, company of friends/classmates, availability of teachers and good diet in the hostels. In order to improve the academic achievement, there is a need to lay more emphasis on practical work, more discussion in class rather

than dictating notes, more seminars and debates should be organized, syllabus should be updated regularly and internship should be introduced.

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