

**CREDENTIALS AND EXAMINATION OF THE FACTORS AFFECTING THE  
STUDENTS' ACADEMIC ACHIEVEMENT IN HIGHER EDUCATION  
(A CASE STUDY OF UNIVERSITIES IN PUBLIC & PRIVATE SECTOR  
AT D.I.KHAN)**

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**ABSTRACT**

Education is a social process and highly educated individuals can promote a society. Several factors affect academic achievements of students in higher education. In present study these factors were categorized into academic factors, personal factors, socio economic factors and co-curriculum and guidance. Data was collected from 80 post graduate students of public and private sector universities in D.I.Khan, using structured questionnaire and with the help of enumerator. Impact of academic factors, personal factors, and socio economic factors on CGPA using Regression Analysis was found significant. Collective impact of all factors was significant at  $P = 0.014$  with  $F = 3.375$ .  $R = 0.391$  showed that collective change of one unit in independent variables brought 39% change in dependent variable CGPA.

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**INTRODUCTION**

Education is a social process, and individuals participate in social activities of a community. Educated individuals can control the environment and make community healthy in all walks of life and develop the area economically. But only those highly educated individuals can do this who really learn. Learning of individuals depends upon a number of factors. Therefore objective of this paper was to explore those factors and to analyze them in order to see their distinctive impact on students' achievement in higher education. The research was focused on graduate and posts graduate students of universities of both sectors i.e. public and private sectors at Dera Ismail Khan a district of Khyber PakhtunKhwā (Pakistan), where

literacy rate is 31.3% (1998 census report). The study area is economically backward because of lacking facilities for economic development. Majority of the students in the area have been facing, latest educational facilities, health facilities, parents' interest etc. Here males are prioritized to get education because education is attached to employment and male has to support family financially and female has to look after house hold affairs. Findings may help stake-holders to take into consideration the element brought forward as a result of study.

**STATEMENT OF PROBLEM**

Students' academic achievement is one of the key determinants in assessing superiority of education. Student of

higher education can state the factors contributing in their better academic achievement. Present study is to discover through literature review and then to analyze those factors which have idiosyncratic bang on students' achievement in higher education.

### RESEARCH HYPOTHESIS

H<sub>0</sub> = Academic Factors, personal factors, socio economic factors and Co-curriculum and Guidance factors all collectively have impact on academic achievement.

H<sub>1</sub> = Academic Factors, personal factors, socio economic factors and Co-curriculum and Guidance factors all collectively have no impact on academic achievement.

Also individual impact of Academic Factors, personal factors, socio economic factors and Co-curriculum and Guidance factors on academic achievement is sub hypothesized.

### LITERATURE REVIEW

A range of factors affects students' academic achievements at graduate and postgraduate level, which may be grouped into institutional environmental factors, personal factors, socio economic factors, career factors etc. Those students who are interested and actively engaged in studies show significantly high academic performance (Linnakyl et al 2004).

Students' mind-set towards a picky subject has a positive impact on academic performance (Bos & Kuiper, 1999). Previous academic base and

achievements, motivational factors, teaching methodology and classroom environment significantly influence academic performance (Romer 1993; Von Rhöneck, Grob, Devadoss and Foltz, 1996; Schnaitmann, & Völker, 1998).

Better socio-economical condition and high Parents' educational level and interest influence the quality of education for their children (Bos & Kuiper, 1999, Rainey & Murova, 2004). The local environment and family traits with respect to study habits significantly influence academic achievement (Linnakyl et al, 2004; Henderson & Berla, 2006). Institutional environment indicated by characteristics such as the teachers' leaning towards improving educational performance and their prospect for pupil accomplishment are vital for student achievement (Brookover & Lezotte, 1979; Yvonne Beaumont Walters, Kola Soyibo, 1998; Schneider, 2002; Karemera 2003). Guidance services provided by the institute or community play a significant role in accomplishment of good academics (Chaudhary, 2006).

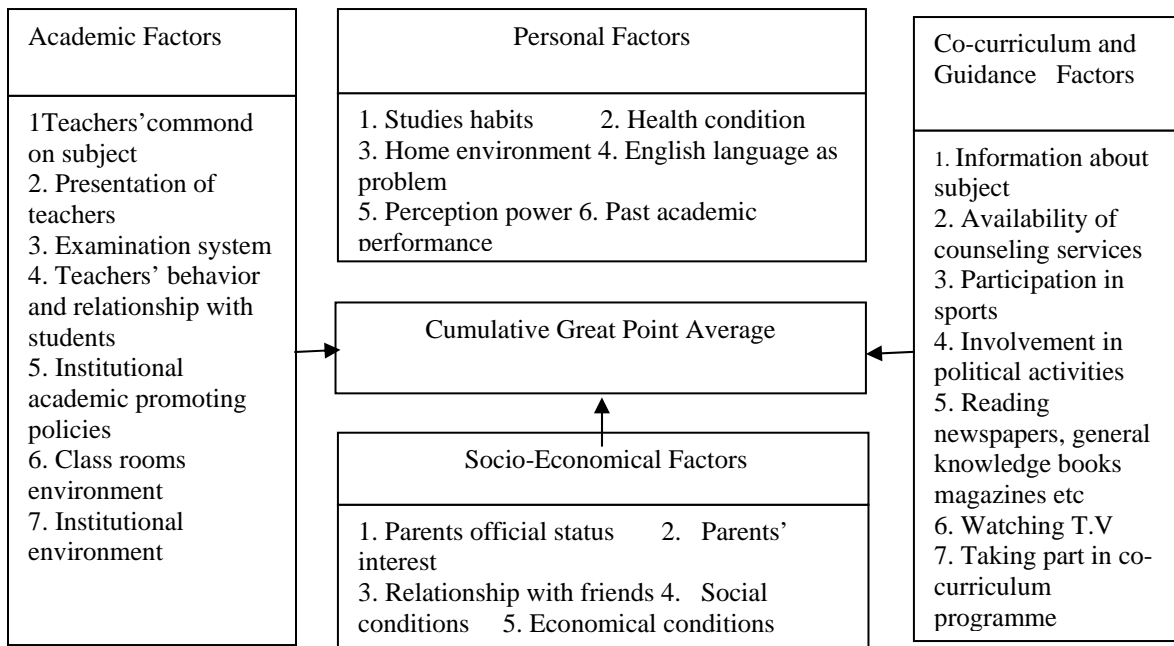
Siegfried & Fels (1979) concluded that students learning also depend upon the student's capacity to learn. Gutman & Midgley (2000), Henderson and Mapp (2002), Van Voorhis (2001) found that "students whose parents take interest in their studies score higher grades and enrolled in higher-level programs

### METHODOLOGY

Primary data from 80 graduates and Post

graduate students in science and arts subject of Public and Private sectors universities was collected using structured questionnaire and with the help of enumerator who was researcher himself. However work was tedious but necessary for collecting accurate data from elements of the sample without any unnecessary delay. Sampled elements were selected by stratified random sampling technique. Among three Strata formed by researcher 50 students were sampled from Gomal University, 20

students were sampled from Qurtuba University and 10 from campus of Sarhad university at D.I.Khan. A five-point Likert scale was used in questionnaire on research variable **academic achievement** measured by researcher in cumulative great point average(CGPA) per term and on different attributes of all independent variables used in the model that researchers developed himself on the basis of literature review



Questions asked on academic factors were about teacher's command on subject, presentations of most of teachers, impact of examination system on learning of students, teachers' behavior towards students encouraging them towards studies, institutional academic promoting policies (Scholarship, Transport, Library access etc), impact of Class rooms environment

and institutional environment on studies of students. Personal factors included students study habits, health, home environment, problem of language used as a medium of learning, perception power and past academic achievements of students. Among social and economical factors, parents/guidance official status, parents/guidance interest in the study of their children,

relationships of students with friends, social conditions(Customs, Taboos etc) and economical conditions were seen. In co-curriculum and guidance factors students were asked about awareness of subject being studied, counseling services to solve their academic problems, participate in sport, involvement in politics, interest in reading newspapers and general knowledge books and books that entertained him, watching T.V for multipurpose and taking part in entertainment programme of the institution(Kirmani,2008). Regression analysis was used to see impact of research variables used in the model on average CGPA for last four terms

### MODELING

The General Linear Model is commonly estimated using ordinary least square has become one of the most widely used analytic techniques in social sciences (Cleary and Angel 1984). Most of the statistics used in social sciences are based on linear models, which means trying to fit a straight line to data

collected. Ordinary least square is used to predict a function that relates dependent variable (Y) to one or more independent variables ( $x_1, x_2, x_3 \dots x_n$ ). It uses linear function that can be expressed as

$$Y = a + bX_i + e_i \quad \text{Where}$$

- a Constant
- b Slope of line
- $X_i$  Independents variables
- $e_i$  Error term

Hence to assess contribution of different determinants on GPA Linear Regression Model was expressed as follow

$$Y = (\text{cumulative great point average per term}) = a (\text{constant}) + X_1 (\text{Academic factors}) + X_2 (\text{Personal factors}) + X_3 (\text{Social and economical factors}) + X_4 (\text{Co-curricule activities and guidance services}) + e_i (\text{Error term})$$

### ANALYSIS AND INTERPRETATION

Estimation of the academic performance showed moderate to strong multi co linearity among the independent variables (table1).

**Table 1 Regression impacts of following independent variables on GPA**

Model	R	R Square	Adjusted R Square	F	Sig.
1	.391	.153	.107	3.375	.014
Independent Variables	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	78.938	11.229		7.030	.000
Academic Factors	-.813	.336	-.273	-2.420	.018
Personal Factors	.840	.352	.289	2.388	.019
Socio Economic Factors	-.734	.342	-.262	-2.147	.035
Co- curriculum and Guidance Factors	.205	.241	.096	.848	.399

However, co-curriculum and guidance factors appeared statistically non significant. Negative sign of academic factors and socio economic factors showed that students having poor attention from parents, teachers and with poor financial background were more responsive to poor academic achievement. Positive sign of personal factors showed that students with good study habits, good physique and home environment more helpful in studying were practicing more academic achievements. The  $R^2$  and Adjusted- $R^2$  values suggest that 15 percent variations in CGPA were explained by the explanatory variables included in the model. The coefficient for academic factors, personal factors, socio economic factors was significant below 5 percent level and suggests that academic factors, personal factors, socio economic factors affected CGPA positively. One percent increase in academic factors, personal factors; socio economic factors increased CGPA about 15%.

## DISCUSSION AND CONCLUSIONS

Higher education students with learned academic achievements are the doom of a nation. Therefore it is the need of the time to be mindful of their perceptions regarding their academic achievements. Present cram hushed-up with some results regarding students' discriminations and their achievements. Data analysis revealed that overall higher educated students differ with respect to academic factors, personal factors and socio economic factors. They

consider these factors very important for their academic achievements. They admit the role of teachers and parents as influential in their success. They wished the scholarships over other financial aid, arrogating that financial status has nothing to do with the achievement. They accepted that good study habits and medical fitness succumbed better results. They accepted as true negative effect of unconstructive habits and activities. They were well sentient of their appraisal system and were able to make shrewd suggestions. In rejoinder to the result of unfair means (cheating, bribery and approach) on achievement, students were of a mind towards an ambivalent status. Students were considering participation in sports, involvement in political or students' union activities, watching T.V programmes irrelevant to their academic achievements. From above findings and discussion it is concluded that academic achievement is dependent on academic factors, personal factors and socio-economic factors. It means that where there falls responsibility on students to develop good study habits in them look after their health and learn English as medium of their study to improve their academics there also fall responsibility on institutions, teachers, parents and Government to provide them such environment and facilities that are helpful in promoting their academics. For further research it is hereby recommended that some others factors such as motivational factors, behavioral factors, contingent factors and

situational factors etc could possibly affect on academic achievement at higher education. The above research findings may be applied below higher level education.

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