Factors Affecting Students’ Academic Performance

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Abstract - Many practical studies are carried out to investigate factors affecting college students’ performance. The focus of this research is that student performance in intermediate examination is linked with students’ outline consisted of his approach towards communication, learning facilities, proper guidance and family stress. The research is based on student profile developed on the bases of information and data collected through assessment from students of a group of private colleges.

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Abstract - Many practical studies are carried out to investigate factors affecting college students’ performance. The focus of this research is that student performance in intermediate examination is linked with students’ outline consisted of his approach towards communication, learning facilities, proper guidance and family stress. The research is based on student profile developed on the bases of information and data collected through assessment from students of a group of private colleges.

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I. Introduction

School, colleges and universities have no worth without student. Students are most essential asset for any educational institute. The social and economic development of the country is directly linked with student academic performance. The students’ performance (academic achievement) plays an important role in producing the best quality graduates who will become great leader and manpower for the country thus responsible for the country’s economic and social development (Ali et.al, 2009). Student academic performance measurement has received considerable attention in previous research, it is challenging aspects of academic literature, and science student performance are affected due to social, psychological, economic, environmental and personal factors. These factors strongly influence on the student performance, but these factors vary from person to person and country to country.

From the last few years in Pakistan literacy rate and education improved and most of the instituted in Pakistan improving the educational level and produce well educated, competitive and skilled person, those meet dynamic growing market requirement. That’s a reason the researcher find out such factors that effecting student performance, especially in rural areas where student face lot of problem.

Previously mostly study of student academic performance conducting on such issues like gender difference, teacher’s education and teaching style, class environment, socio economic factor and family education background. The finding of this study varies from region to region and their results differ in cities and rural areas.

This research is focuses on the private colleges in Pakistan. Students of private colleges of Rawalpindi and Islamabad are taken as population and focuses on the result of the student performance and their achievements in the academic year.

We measure the student academic performance through several ways like CGPA, GPA and their test result. Most of the researcher around the word used the GPA to measure the student performance (Galiher, 2006; Darling, 2005; Broh, 2000; Stephen & Schaban, 2002). They used GPA to measure student performance in particular semester. Some other researcher, they measure student performance through the result of particular subject or the previous year result (Hijazi & Naqvi, 2006; Hake, 1988, & tho.1994).

II. Significance

Previous studies focuses on different factors such class schedules, class size, English text books, homework, environment of the class, technology used in the class and exams systems, extracurricular activities, family and work activities, financial, and etc. The study may helpful for both college’s policy makers and parents of the students. It helps the college administration to design and implement the policies to improve the students’ performance and the quality of education by changing the attitude of students towards learning, facilitating students and improving the teaching procedures. Parents can use the outcomes of the study to solve the students’ problems especially financial problems and to look after them. It may also create awareness among students about their rights and responsibilities to achieve quality education.

III. Research Question

What are the important factors that affect students’ academic performance?

IV. Research Objectives

The objective of this research paper is to explore the important factors that affect the academic performance of the students.
V. Contribution

Previously a lot of research has been done on this topic. Different researchers researched on various variables and a lot of different variables were studied. This research is different in a way that it is the first research in which a variable “proper guidance” is studied, moreover in Pakistan only one research was carried out on this topic and it was conducted by Abid Hussain in 2006 and that too was based on the findings of school’s whereas this research is conducted on colleges.

Our contribution to this study is that we explore the four factors that affect students’ academic performance. These factors are students' communication skills, learning facilities, proper guidance and family stress. In Pakistan scenario, many researchers have done a lot of work on communication, learning facilities and family stress. This research will be helpful for the parents as well as the teachers of the students to guide them properly and as per their abilities.

VI. Literature Review

a) Student Performance

Galicher (2006) and Darling (2005), used GPA to measure student performance because they mainly focus on the student performance for the particular semester. Some other researchers used test results or previous year result since they are studying performance for the specific subject or year (Hijazi and Naqvi, 2006 and Hake, 1998).

b) Communication

Many researchers has been discussed the different factors that affects the student academic performance in their research. There are two types of factors that affect the students’ academic performance. These are internal and external classroom factors and these factors strongly affect the students’ performance. Internal classroom factors includes students competence in English, class schedules, class size, English text books, class test results, learning facilities, homework, environment of the class, complexity of the course material, teachers role in the class, technology used in the class and exams systems. External classroom factors include extracurricular activities, family problems, work and financial, social and other problems. Research studies shows that students’ performance depends on many factors such as learning facilities, gender and age differences, etc. that can affect student performance (Hansen, Joe B., 2000).

Harb and El-Shaarawi (2006) found that the most important factor with positive effect on students' performance is student's competence in English. If the students have strong communication skills and have strong grip on English, it increases the performance of the students. The performance of the student is affected by communication skills; it is possible to see communication as a variable which may be positively related to performance of the student in open learning. A major distinction of this study from previous studies is that it focuses on open learning (Abdullah AL-Mutairi, 2011).

H1: There is a positive relationship between communication and student performance.

c) Learning Facilities

Karemera (2003) found that students' performance is significantly correlated with satisfaction with academic environment and the facilities of library, computer lab and etc. in the institution. With regard to background variables, he found a positive effect of high school performance and school achievement he found no statistical evidence of significant association between family income level and academic performance of the student.

Robert & Sampson (2011), found that the member of educational board will be educated and their impact on school is positive, for professional development it is essential for student learning. The students who are actively engage in the learning process are observed to have a positive correlation with the CGP. A Study effort from student and the proper use of the facilities provided by the institution to the student, a good match between students’ learning style and are positively affect the student's performance (Norhidayah Ali, et. al., 2009).

Young (1999), held the view that student performances are linked with use of library and level of their parental education. The use of the library positively affected the student performance.

The academic environment is the effective-variable for students and has positive relationship with fathers’ education and grade level (Kirmani & Siddiquah, 2008).

H2: There is a positive relationship between learning facilities and student performance.

d) Proper Guidance

Noble (2006), students’ academic accomplishments and activities, perceptions of their coping strategies and positive attributions, and background characteristics (i.e., family income, parents’ level of education, guidance from parents and number of negative situations in the home) were indirectly related to their composite scores, through academic achievement in high school.

The students face a lot of problems in developing positive study attitudes and study habits. Guidance is of the factor through which a student can improve his study attitudes and study habits and is directly proportional to academic achievement. The students who are properly guided by their parents have performed well in the exams. The guidance from the
teacher also affects the student performance. The guidance from the parents and the teachers indirectly affect the performance of the students (Hussain, 2006).

H3: There is a positive relationship between proper guidance and student performance.

e) Family Stress

Socio-economic factors like attendance in the class, family income, and mother’s and father’s education, teacher-student ratio, presence of trained teacher in school, sex of student and distance of school are also affected the performance of the students. (Raychauduri et al., 2010)

Kernan, Bogart & Wheat (2011), academic success of graduate student will be enhanced if the optimal health related barriers are low. There is negative relationship between college credit and stress but weak relationship between GPA (Grade Point Average) and stress. (Zajacova, Lynch and Espenshade, 2005)

Amitava Raychaudhuri, et. al., (July 2010), found that numerous studies have been done to identify those factors which are affecting student’s academic performance. The students’ academic performance depends on a number of socio-economic factors like students’ attendance in the class, family income, mother’s and father’s education, teacher-student ratio, presence of trained teacher in school, sex of the student, and distance of schools.

Hijaz and Naqvi (2006) observed that there is a negative relationship between the family income and students’ performance and they focus on the private colleges in Pakistan.

H4: There is a negative relationship between family stress and student performance.

VII. Theoretical Framework

VIII. Methodology

This section discusses the sample selection procedure, variables selection, the model used for the research and the statistical techniques.

a) Measures

The extent of existence for all variables in the research area was measured on a five-point likert scale ranging from, strongly disagree to Strongly Agree.

Ranging from 1 to 5 Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), Strongly Agree (5).

b) Data Set

The source of data for this study is primary data acquired through questionnaire. 175 questionnaires were distributed.

c) Statistical Tools

Mean, Standard deviation, correlation and regression analysis are used through appropriate statistical package.

IX. Results and Conclusion

Findings of the study are discussed as under.

a) Data Analysis and Discussion

In order to meet the purpose of the study, this section has five parts for analyzing the data collected for the study. The

Five parts are: (a) data sample information, (b) descriptive analysis, (c) correlation analysis, (d) regression analysis and (e) Hypothesis testing.

b) Reliability of the Scale

Reliability of total Items is 0.710 in Table 1 which shows its significance.

c) Reliability of Total Items

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.710</td>
<td>20</td>
</tr>
</tbody>
</table>

Reliability of Individual Items is shown in Table 2.
**Factors Affecting Students' Academic Performance**

**d) Reliability of Individual Items**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach's Alpha</th>
<th>No.of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Performance</td>
<td>.716</td>
<td>2</td>
</tr>
<tr>
<td>Communication</td>
<td>.497</td>
<td>5</td>
</tr>
<tr>
<td>Learning Facilities</td>
<td>.735</td>
<td>4</td>
</tr>
<tr>
<td>Proper Guidance</td>
<td>.806</td>
<td>3</td>
</tr>
<tr>
<td>Family Stress</td>
<td>.258</td>
<td>6</td>
</tr>
</tbody>
</table>

**Descriptive Analysis**

Descriptive statistics represents the calculated means and standard deviations for the dependent variables, communication, learning facilities, proper guidance and family stress and independent variable, student performance.

Study shows that mean of student performance is 3.7903 and standard deviation is .98672.

Mean of communication, learning facilities, proper guidance and family stress are 4.1626, 4.2597, 4.1462 and 4.28172 respectively, which shows that respondent are agree that these variables effect student performance and standard deviation for these independent variables are 0.50390, 0.67713, 0.89659 and 0.396398 respectively., which is shown in Table 3:

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Performance</td>
<td>155</td>
<td>1.00</td>
<td>5.00</td>
<td>3.7903</td>
<td>.98672</td>
</tr>
<tr>
<td>Communication</td>
<td>155</td>
<td>1.20</td>
<td>5.00</td>
<td>4.1626</td>
<td>.50390</td>
</tr>
<tr>
<td>Learning Facilities</td>
<td>155</td>
<td>1.25</td>
<td>5.00</td>
<td>4.2597</td>
<td>.67713</td>
</tr>
<tr>
<td>Proper Guidance</td>
<td>155</td>
<td>1.00</td>
<td>5.00</td>
<td>4.1462</td>
<td>.89659</td>
</tr>
<tr>
<td>Family Stress</td>
<td>155</td>
<td>3.167</td>
<td>5.000</td>
<td>4.28172</td>
<td>.396398</td>
</tr>
</tbody>
</table>

| Valid N (listwise) |       |         |         |        |               |

**Demographic Analysis**: Demographic results were obtained. The total sample size was 155.

<table>
<thead>
<tr>
<th>Gender</th>
<th>No</th>
<th>%age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>97</td>
<td>62.6%</td>
</tr>
<tr>
<td>Female</td>
<td>58</td>
<td>37.4%</td>
</tr>
</tbody>
</table>

**Correlation Analysis**

There is a degree of association between communication and student performance i.e. 13 percent and also shows negative value and probability of error is also low.

There is degree of association between learning facilities; proper guidance and family stress with student performance are 13 percent, 20 percent and 2 percent respectively as shown in Table 6.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Student Performance</th>
<th>Communication</th>
<th>Learning Facilities</th>
<th>Proper Guidance</th>
<th>Family Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Performance</td>
<td>1</td>
<td>.132**</td>
<td>.137*</td>
<td>.200*</td>
<td>-.020</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.002</td>
<td>.040</td>
<td>.013</td>
<td>.809</td>
</tr>
<tr>
<td>N</td>
<td>155</td>
<td>155</td>
<td>155</td>
<td>155</td>
<td>155</td>
</tr>
<tr>
<td>Communication</td>
<td>.132**</td>
<td>1</td>
<td>.157</td>
<td>.176*</td>
<td>.139</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.002</td>
<td></td>
<td>.051</td>
<td>.028</td>
<td>.085</td>
</tr>
<tr>
<td>N</td>
<td>155</td>
<td>155</td>
<td>155</td>
<td>155</td>
<td>155</td>
</tr>
<tr>
<td>Learning Facilities</td>
<td>.137*</td>
<td>.157</td>
<td>1</td>
<td>.571**</td>
<td>.245**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.040</td>
<td>.051</td>
<td></td>
<td>.000</td>
<td>.002</td>
</tr>
<tr>
<td>N</td>
<td>155</td>
<td>155</td>
<td>155</td>
<td>155</td>
<td>155</td>
</tr>
<tr>
<td>Proper Guidance</td>
<td>.200*</td>
<td>.176*</td>
<td>.571**</td>
<td>1</td>
<td>.055</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.013</td>
<td>.028</td>
<td>.000</td>
<td></td>
<td>.498</td>
</tr>
<tr>
<td>N</td>
<td>155</td>
<td>155</td>
<td>155</td>
<td>155</td>
<td>155</td>
</tr>
<tr>
<td>Family Stress</td>
<td>-.020</td>
<td>.139</td>
<td>.245**</td>
<td>.055</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.809</td>
<td>.085</td>
<td>.002</td>
<td></td>
<td>.498</td>
</tr>
<tr>
<td>N</td>
<td>155</td>
<td>155</td>
<td>155</td>
<td>155</td>
<td>155</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).**
e) Regression Analysis

It includes Model Summary and ANOVA and Coefficient.

f) Model Summary

Model summary is shown in Table. Value of R-Square is .0553 shows that 55% variation in student performance due to the independent variables communication, learning facilities, proper guidance and family stress.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.229*</td>
<td>.553</td>
<td>.427</td>
<td>0.0021</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Family Stress, Proper Guidance, Communication, Learning Facilities

Table 7 : ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>7.889</td>
<td>4</td>
<td>1.972</td>
<td>20.083</td>
<td>.026*</td>
</tr>
<tr>
<td>Residual</td>
<td>142.046</td>
<td>150</td>
<td>.947</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>149.935</td>
<td>154</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F-statistics were carried out to find the overall strength of the model. The value of F-Statistic 20.083 shows that the model is highly significant shown in Table 8.

g) Coefficient & Hypothesis Testing

On the basis of Beta coefficients the model shows that communication causes 20% positive variation in student performance and t -value is also significant. So we accept H1 which states that “there is a positive relationship between communication and student performance.

Learning facilities causes 16% variation in student performance but the direction is positive direction. Here t-value is also significant. So we accept H2 which states that that “there is positive relationship between learning facilities and student performance.

Proper guidance causes 17% variation in student performance in positive direction and t – value is also significant. So we accept H3 which states that that “there is positive relationship between proper guidance and student performance.

Family stress causes 13% variation in student performance but in opposite direction or negative direction and t – value is insignificant. So we reject H4 which states that “there is a negative relationship between family stress and student performance.

X. Discussion

This study was conducted to explore the important factors that affect the students’ academic performance. Research was conducted on private colleges in Rawalpindi and Islamabad. Four hypothesis used in the study to check the effect of independent variables on dependent variables. By using the appropriate statistical package it is found that communication, learning facilities, proper guidance and family stress are the factors that affect the student performance. Our three hypotheses are accepted and one hypothesis is rejected. Communication, learning facilities and proper guidance shows the positive impact on the student performance and the family stress shows the negative impact on the student performance but the significant level is high. So, it is indicated that the communication is more important factor that affect the student performance and the learning facilities and proper guidance are also affect the student performance. Family stress also affects the student performance and reduces the performance of the student and affects negatively the student performance.

a) Limitations

- There are certain limitations of this study. Firstly, the sample size taken in this study was very small that is only 155. If this study is being carried out again with large sample size the result might be improved than existing study.
• Second limitation of the study was that study conducted on only the 2 cities of Pakistan i.e., Rawalpindi and Islamabad.
• Including more others relative factors that affect the student performance can improve the results.

b) Suggestions and Recommendations
• The student performance should be improve if the administration of the college provides proper leaning facilities to the students and also improve the environment of the college.
• The student performance should be improve if the students have good and effective communication skills and have good competence in English. For this the administration should take steps to arrange the class for the English language.
• The student should perform well if they are properly guided by the parents and also by their teacher. If the student should know well about their abilities and their competences then he performs well.

References Références Références