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STUDENTS' PERCEPTION TOWARDS TEACHERS' BEHAVIOR: ITS IMPACT ON THEIR MOTIVATION LEVEL

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Abstract

In this study, Students perception towards way of teaching is analyzed. This study is also used to determine to see the impact of teachers' behavior among students motivation level is analyzed. The sample of size 243 is taken from the size of 2813 population. Questionnaire is used to collect data from respondents. Six factors are studied to check the students' perceptions i-e proximity, Assessment strategy, class room environment, Evaluation strategy, and Cgpa. Five techniques are used to see the significance of these considered factors i-e Confirmatory factor analysis, Regression, Correlation and Neural network. It is concluded that there is a significant impact of proximity, Assessment strategy, Evaluation Strategy with CGPA. It is recommended that if these factors will be improved then it will be helpful in increasing motivation level of students.

Keywords
Evaluation strategy, Regression, Correlation, Proximity, Confirmatory factor analysis

1. Introduction

Education plays a vital role in the development of country. It enables people to understand their duties and rights for the society. Education enhances the abilities of the people for playing key role in the development of society. Society with educated people makes a good country. Education is a key determinant for the progress of country.

Pakistan is an under developing country. Various factors have significant impact on the prosperity of country. Most important of them is education. A good educational system produces extra ordinary skills in people so they can play their role for prosperity and success of country. Lake of education results is a big loss for the economic condition of country. Pakistan has facing many problems anxiety, depression, illitercay and an inefficient educationcaltional system. In this study, factors effecting education system will be discussed. A good educational system plays a central role for the development

of the country. An education system that has too many flaws is unable to develop and to enhance the skills of the students.

Different factors that effects education system. Quality of education plays a key role in making good infrastructure of education system. Education institution use different techniques to provide a good quality of education. The word quality of education seems to be education incomplete without considering the teachers and students. An institution with highly qualified teachers has a good quality of education.. Teacher plays as a key determinant in enhancing the quality of education. There is direct relationship between teachers' and quality of education (Sahragard & Ansaripour, 2014).

Teachers develop and enhance the skills of students. Teachers are role model for their student. How they deal with their students, their way of teaching and their evaluation criteria's are significant factors for the success of students. It becomes more important to study the impact of teachers' behavior on their students. In literature, most of the studies had been done on impact of teachers' behavior on the students' personality (Lizzio *et al.,* 2002;Den Brok *et al.,* 2005; Shah, 2011) etc.

Teachers' behavior is vast domain .It comprises with different factors. For the current study, it becomes more important to describe the domain of teachers' behavior. In this study, teachers' behavior will be analyzed by studying various factors proximity (student-teacher interaction), teaching styles, questioning styles, assessment strategies and their evaluation styles.

Teachers' behavior has a great influence on the personality of students. It enhances the interpersonal skills of students. A teacher is a significant determinant for enhancing the motivation of student. A teacher with co-operative nature encouraging students to take part in different academic activities. Their participation in class room mostly depends on their classroom environment that is made by a teacher. A co-operative environment will encourage students to share their ideas regarding study with their teachers.

Motivation level of students is highly affected by controlling environment in class rooms .Controlling environment in class rooms means that teacher do not interact with their student, showing their strict behavior towards students and the use of harsh words in class rooms. Controlling environment discourage students to show their skills in front of teachers. They feel fear to ask a question if they don't understand any term regarding lecture. In such situation, motivational level of students becomes decrease. They loss their confidence which is major factor in their success (Hein, 2012).In different Institutions, students' assessment about teaching effectiveness activity is practiced. The purpose of such activities is to take students views regarding teaching quality and different. Such activities help an institution to find factors that plays vital role in their education structure (Chen & Hoshower, 2003).

In this study, students perception will be study regarding teachers' behavior and its impact on their motivation level. Teachers' behavior (proximity, teaching methodology, Questioning style, assessment strategies and Evaluation strategies) deal as factors that effect students' motivation (GPA).

(Chen & Hoshower, 2003) conducted a study on "Student evaluation of teaching effectiveness: as assessment of student perception and motivation. Expectancy theory (Theory of motivation) had been adapted in study. Correlation had been applied between force model and factors (gender, GPA, perception about the evaluation system). The study revealed that students' perceptions consider an improvement in teaching to be the most attractive outcome of a teaching evaluation system.

(Hein, 2012) conducted a study on "The effect of teacher behavior on student motivation and learning outcomes" .In the study, teacher behavior is analysed by classifying into teacher interpersonal skills and teaching methodology. The study based on self-determination theory (theory of motivation).The results showed that controlling environment (Strict) has a negative impact on students motivation. The study revealed that teachers' behavior is strongly related to the motivational level of students.

(Den Brok *et al.*, 2005) conducted a study on "The effects of teachers' attitudes on student personality and performance". The study involves qualitative data for analysis. A Meta analysis technique was adapted for analyzing the factors. The study revealed that teachers' positive behavior have a positive impact on students.

(Kyriakides *et al.,* 2009) conducted a study on "Teachers' behavior and student outcomes: suggestions for research on training and professional development". Observational instrument used for the analysis of dependent variable (student outcomes).Questionnaire was used to for the analysis of independent variable. The study revealed that teachers at more advance level (Teaching styles) are more effective and had a great impact on student learning outcomes.

(Ali *et al.,* 2009) conducted a study on "students' perception of university teaching behavior". Cluster sampling was used for the selection of sample from universities .Stratified sampling was then used for the selection of department from each university. Factor analysis was used for obtaining significant factors. The study concluded that Teachers' have a great impact on motivational level of students

(Ulug *et al.,* 2011) conducted a study on "University students' perception of the learning environment and academic outcome: implications for theory and practice". Regression analysis was used to analysed student perceptions (academic achievement, workload, satisfaction, development of key skills).The study revealed that student perception about workload is a significant factor in their learning outcomes. The study concluded

that students' perceptions about learning environment played a significant role in education.

(Sahragard & Ansaripour, 2014) conducted a study on "Demotivating and Remotivating Factors among MA Students of TEFL: An Iranian Case". The study based on qualitative data.Questainers had been made to conduct interviews. Principal axis factor analysis using a varimax rotation used for obtaining significant factors. The study revealed that teachers characteristics , classroom environment and facilities have significant impact on students demotivation.

1.1. Objectives

Main objective of the study was to analyze the students' perception towards teachers' behavior and its' impact on their motivational level.

The Sub-objectives of the study were :-

- To see relationship b/w teaching styles and GPA of students
- To determine the effect of proximity on GPA of students
- To see key determinants effecting students motivation

2. Methodology

In this study, population of size 2813 is consists of number of students in University of Gujrat Sialkot sub-campus is considered. No of students enrolled in first semester are excluded from the study. A sample of 243 has been drawn from population. Stratified sampling has been used for selecting a sample. Department of university is considered as stratum. Each stratum is homogenous within itself but it is heterogeneous out of the stratum.Proportinal allocation method has been used for selecting a sample from each strata. Data is selected by using an adaptive questionnaire. Survey method was used for data collection. By considering the validity and reliability of questionnaire and reducing the interviewer error the questionnaire distribution method was used. Questionnaire consisted of the two main distinction parts, the first part consists of demographic information of the respondents and second section contained the information about the selected factors. To take respondents opinion four point Likert scale was used.

SPSS has been used for analysis of data. Factor analysis has been considered to obtain the significant factors. Neural Network has been used to check the impact of factors (proximity, teaching methodology, Questioning style, assessment strategies and Evaluation strategies) on gender (Male, Female).Correlation coefficient has been used to determine the relationship b/w factors (cgpa, proximity, teaching methodology, Questioning style, assessment strategies and Evaluation strategies). Regression analysis has been applied to check the impact of factors (proximity, teaching methodology, Questioning style, assessment strategies and Evaluation strategies) on Achievement (CGPA) of students software has been used for Confirmatory analysis

3. Results and Discussion

To obtain significant and accurate results data should be reliable. If data is not reliable then results will be misinterpret. Cronbach Alpha is well known reliability measure. In this study, Table 1. shows 0.72 reliability of data. It indicates that data is reliable for further analysis

3.1. Reliability of data:

Table 1: Reliability Statistics

Cronbach's Alpha	N of Items
.729	40

3.2. Descriptive Statistics

Table 2: Results of Descriptive Analysis

Factors	N	Minimum	Maximum	Mean	Std. Deviation
Proximity	243	12.00	43.00	20.9383	3.47962
Q.style	243	4.00	20.00	13.4568	2.67085
Teaching.M	243	22.00	77.00	34.5267	5.39459
Assess.str.com	243	9.00	35.00	22.4403	4.58072
CR.env	243	9.00	78.00	21.6790	5.10346
Ev.str	243	6.00	25.00	13.6502	3.57289
age in year	243	18.00	26.00	20.5926	1.48361
Valid N (listwise)	243				

Table 2 shows the result of descriptive analysis. In descriptive statistics, minimum, maximum, mean and variation has been explained for each variable. Teaching methodology has mean value is 34.5267 and its standard deviation value is 5.39459.Both values are greater among other variable. Greater variation is in Teaching methodology variable that is 5.39459.It indicates that teaching methodology has a lot of variation from its average value. As, students' perception regarding methodology is vary student to student with great variation. Age explain less variation that is 1.48361.It indicates that age variable has less variation from its mean value as age of students is almost same

3.3. Factor Analysis

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.765
Bartlett's Test of Sphericity	Approx. Chi-Square	2590.569
	Df	703
	Sig.	.000

Table 3 shows the result of factor analysis. KMO-Bartlett's test is used to check the accuracy of sampling. Kaiser-Meyar-Olkin Measure of sampling adequacy is 0.765 or 76%.It indicates that data is accurate and appropriate to use factor analysis

Table 4: Extraction Method: Principal Component Analysis.

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.026	15.857	15.857	6.026	15.857	15.857
2	3.774	9.931	25.788	3.774	9.931	25.788
3	2.093	5.507	31.295	2.093	5.507	31.295
4	1.603	4.220	35.515	1.603	4.220	35.515
5	1.576	4.148	39.663	1.576	4.148	39.663
6	1.455	3.828	43.491	1.455	3.828	43.491
7	1.356	3.569	47.059	1.356	3.569	47.059
8	1.227	3.228	50.288	1.227	3.228	50.288
9	1.192	3.137	53.425	1.192	3.137	53.425
10	1.138	2.994	56.419	1.138	2.994	56.419
11	1.109	2.918	59.337	1.109	2.918	59.337
12	1.044	2.748	62.085	1.044	2.748	62.085
13	.991	2.609	64.694			
14	.923	2.430	67.123			
15	.881	2.318	69.442			
16	.849	2.234	71.676			
17	.784	2.063	73.739			

Factor analysis method is well known method for extracting the factors that are highly significant. Factors that are explain a lot of variation in dependent variable will be retained by factor analysis. Table 4 shows that factor one has 15.857% variation as well as its eigenvalue s greater than 1 that is 6.026.At factor 13 the going to low their eigenvalue becomes low as well as variation explained by them is also low. So, it reveals that first twelve component are significant so they should be retain.

3.4. Factors loading

Table 5: Extraction Method: Principal Component Analysis. (12 components extracted.)

	Component											
	1	2	3	4	5	6	7	8	9	10	11	12
q1.1	.479				-.318							
q1.2	.502											
q1.3	.519											
q1.4	.392			.377								
q1.5		.306				.314					.408	.343
q1.6					.368			.496		.326		
q2.1			.388			.364		-.339				
q2.2		.492										-.444
q2.3	.363		.395		.301					.371		
q2.4	.372						.466					
q3.1	.661											

q3.2	.656											
q3.3		.508			-.371							
q3.4	.669											
q3.5		.513		.457			-.308					
q3.6	.497											
q3.7	.538		.431									
q3.8								-.570		-.338	-.354	
q3.9		.480	.304				.364					
q3.10		.323	.455			-.349						
q4.1		.385	-.485									
q4.2	.304	.313				-.349						
q4.3	.488					-.361						
q4.4	.366	.354										
q4.5	.484		-.347						-.316			
q4.6		.453		.312						-.395		
q4.7	.543											
q5.1	.318	.325		-.347	-.404							

Table 5 shows the factor loading that is Correlation between the factors and sub factors. Correlation must be .30 or greater since anything lower would suggest a really weak relationship between the variables . It is also recommended that a heterogeneous sample is used rather than a homogeneous sample as homogeneous samples lower the variance and factor loadings (Kline, 1994). The sub factors whose correlation is not equal or greater than are suppressed. As q3.4 has strong relationship with factor 1.Similarly, inverse relationship is also exist between sub factors and factors. As, q5.1 has an inverse relationship between Factor 6.

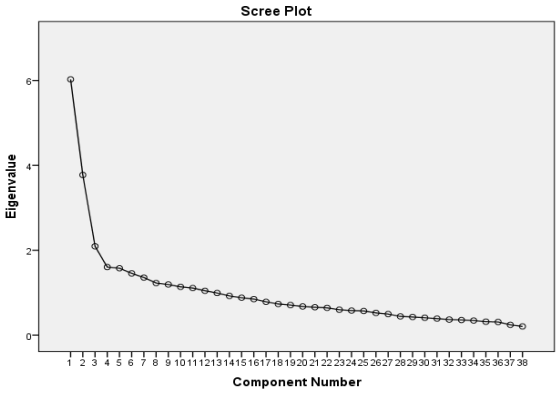

Figure 1: Scree plot of components and eigenvalues (a)

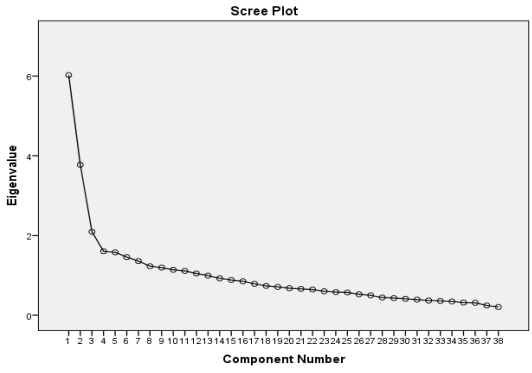

Figure 1: Scree plot of components and eigenvalues (b)

Figure a shows the scree plot of components and eigenvalues. The highest eigenvalue is of factor 1 it becomes flatter as eigenvalues becomes low. The factors having eigenvalues greater than one considered for analysis.

3.5. Confirmatory Factor Analysis

Table 6: p-value of model

N	Minimum Function Test Statistic	Df	P-value
243	1202.789	512	0.000

Confirmatory factor analysis is used to test whether measures of a construct are consistent with a researcher's understanding of the nature of that construct (or factor). As such, the objective of confirmatory factor analysis is to test whether the data fit a hypothesized measurement model**.** From table 1.6 shows that p-value of model suggested that model includes significant factors. It indicates that factors (proximity, questioning style, teaching methodology, assessment strategy, and class room environment and evaluation criteria) have significant impact on motivation of student.

3.6. Regression Analysis

Table 7: Results of regression analysis

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.694	.542		4.971	.000
	age in year	.011	.026	.026	.404	.687
	REGR factor score 1 for analysis 1	.012	.038	.020	.324	.746
	REGR factor score 2 for analysis 1	-.150	.038	-.247	-3.887	.000
	REGR factor score 3 for analysis 1	.059	.038	.098	1.571	.118
	REGR factor score 4 for analysis 1	-.074	.038	-.123	-1.985	.048
	REGR factor score 5 for analysis 1	.019	.038	.032	.520	.604
	REGR factor score 6 for analysis 1	.044	.038	.072	1.160	.247
	REGR factor score 7 for analysis 1	-.082	.038	-.136	-2.196	.029
	REGR factor score 8 for analysis 1	-.033	.038	-.055	-.880	.380
	REGR factor score 9 for analysis 1	.020	.038	.033	.541	.589
	REGR factor score 11 for analysis 1	.033	.038	.055	.881	.379
	REGR factor score 12 for analysis 1	-.039	.038	-.065	-1.046	.297

Regression analysis is used to determine the dependency of one variable among other variables.Table shows 7 the results of regression analysis. In model, intercept value is 2.694 that indicates that minimum change in dependent variable holding all other variables constant is 2.694.Slope value is -0.074 that indicates that one unit change in independent variable(proximity) will return -0.074 change dependent variable. Negative sign indicate the inverse relationship between factor 4 and CGPA .This relationship is also a significant. Similarly, factor 2 and factor shows the same behavior as factor 4.

3.7. Correlation

Table 8: Results indicate the weak correlation between variables

		CGPA	Proximity	q.style	teahing.met	Assess.str	CR.env	Eval.str
CGPA	Pearson Correlation	1	-.121	-.036	-.094	-.105	-.084	-.145*
	Sig. (2-tailed)		.059	.572	.143	.104	.191	.024
	N	243	243	243	243	243	243	243
proximty	Pearson Correlation	-.121	1	.184**	.219**	.375**	.159*	.080
	Sig. (2-tailed)	.059		.004	.001	.000	.013	.214
	N	243	243	243	243	243	243	243
q.style	Pearson Correlation	-.036	.184**	1	.349**	.257**	.263**	.050
	Sig. (2-tailed)	.572	.004		.000	.000	.000	.440
	N	243	243	243	243	243	243	243
teahing. met	Pearson Correlation	-.094	.219**	.349**	1	.421**	.220**	.205**
	Sig. (2-tailed)	.143	.001	.000		.000	.001	.001
	N	243	243	243	243	243	243	243
Assess.str	Pearson Correlation	-.105	.375**	.257**	.421**	1	.347**	.260**
	Sig. (2-tailed)	.104	.000	.000	.000		.000	.000
	N	243	243	243	243	243	243	243
CR.env	Pearson Correlation	-.084	.159*	.263**	.220**	.347**	1	.073
	Sig. (2-tailed)	.191	.013	.000	.001	.000		.256
	N	243	243	243	243	243	243	243
Eval.str	Pearson Correlation	-.145*	.080	.050	.205**	.260**	.073	1
	Sig. (2-tailed)	.024	.214	.440	.001	.000	.256	
	N	243	243	243	243	243	243	243

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

Correlation Analysis has been used to check the correlation between variables. Correlation tells the strength of relationship between variables. Table 8 results indicate the weak correlation between variables (CGPA, Teaching methodology, Assessment strategy, Class room environment, questioning style and evaluation criteria).CGPA has weak negative correlation and insignificant as its p-value is greater than alpha 0.05.Questioning style has weak and

significant relationship with proximity, Assess.str and teaching methodology. The strong relationship exist between questioning style (q.style) and teaching methodology that is 0.421.

3.8. Neural Network

Neural network is a family of non-linear models. When dependent variable becomes categorical the model becomes a non-linear model. Neural network is a well-known technique for data analysis. It is basically used for prediction for each category of dependent variable on the basis of available predictors.

It divides the sample in two categories training and testing group. It shows the summary of correct prediction within each category.

Table 9 results shows that 75% of sample is allocated to training group and 24.7% of sample allocated to testing group. Remaining sample units are excluded from analysis.

Table 9: Case Processing Summary

		N	Percent
Sample	Training	180	75.3%
	Testing	59	24.7%
Valid		239	100.0%
Excluded		4	
Total		243	

Table 10: Classification (Dependent Variable: Gender of respondents)

		Predicted		
Sample	Observed	Male	Female	Percent Correct
Training	Male	19	52	26.8%
	Female	15	94	86.2%
	Overall Percent	18.9%	81.1%	62.8%
Testing	Male	9	18	33.3%
	Female	4	28	87.5%
	Overall Percent	22.0%	78.0%	62.7%

Table 11: Area Under the Curve

		Area
Gender of respondents	Male	.633
	Female	.633

Table 10 results shows that in training group 26.8% is correctly predicted for males and 86.2% is corrected for females.In testing group, there were 33.3% is correct prediction for males and 87.5% is correct prediction for females. Overall,model is correctly predict for females it means that factors have great impact on motivation of females as compare to males.

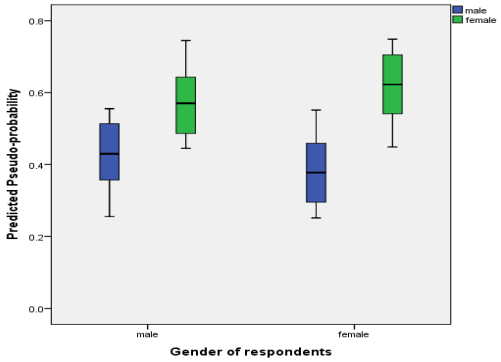

Figure 2: Predicted pseudo-probabilities chart

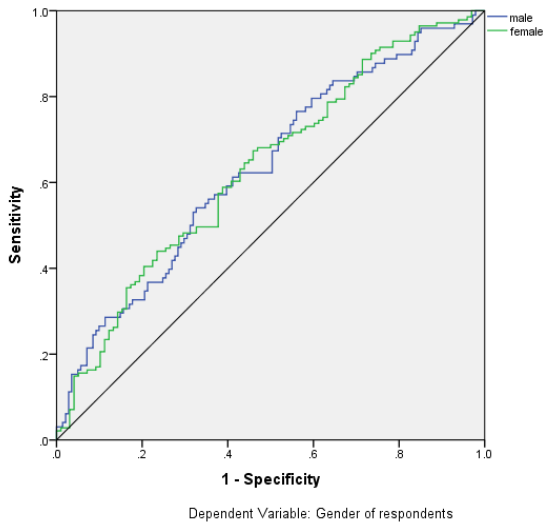

Figure 3: ROC curve

Figure 2 is predicted pseudo-probabilities chart. It reflect the same pattern as exhibit classification table. The box-plot is higher for females as compare to males. Figure 3 is ROC curve classify the males and females equally As from area under curve .6933% is same for males and females.

4. Conclusion and Recommendations

A statistical method by which we can define the degree of relationship or affiliation between two or more construct is termed as correlation. We have used correlation analysis to discover the relationship between factors (proximity, Assessment strategy, class room environment, Evaluation strategy ,and cgpa).CGPA has an inverse relationship with factors(proximity, Assessment strategy, class room environment, Evaluation strategy) similar with (Den Brok *et al*., 2005) .Confirmatry factor analysis indicate that proximity, Assessment strategy, class room environment, Evaluation strategy are significant factors similar with (Greimel-Fuhrmann, 2014). In this study only few of factors have been used in this analysis to see their impact on motivation level of student.one can use other factors to see their impact on motivational level of student. Few of Multivariate statistical techniques has been used. One can be use other techniques for analysis.

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