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Impact of Peer Relationship on Academic Performance of University Students

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ABSTRACT

Peer support interventions have been widely used within the higher education sector as a means to enhance student success and retention. However, much of the evidence to measure the impact of mentoring and coaching has relied on anecdotal and self-reported evidence from the participants. This study was conducted to investigate the impact of peer relationship among university level students. Objectives of current study were to find out the impact of peer relationship on academic performance of university level students and find out the impact of peer relationship on academic performance with respect to demographic variables. The study was descriptive in nature. Survey method was adopted to conduct this study. The population was consisted of 947 students from two Universities of AJ&K. The researchers selected 450 students as sample. Simple random sampling technique was used to collect data from respondents. Questionnaire was used as data collection tool. A close ended questionnaire was developed on five-point Likert scale. The questionnaire was distributed among all students in both universities. After collecting the data, it was analyzed by using statistical techniques. Simple linear regression and Pearson correlation was used to check the impact of independent variable on dependent variable. On the basis of findings, it was concluded that there is significant positive relationship between peer relationship and academic performance of students. It is recommended that teachers should motivate the students to develop positive relationship among students.

INTRODUCTION

A peer group consists of people or individuals that are within ages, close in years, for instance between range of one to four years, the institution serves as primary setting for the membership of peer group. They may be in the same class, the same sex and close interaction is of equals (Olalekan, 2016). Peer relationship is a relation of students with their fellows in a social context. This relation is as important as it develops very positive social-emotional skills along with collaboration, sympathy, and problem-solving skills. However, in addition to these individualized measures of the peer environment, the general quality of peer relations in the class environment is important (Austin & Draper, 1984). It is likely that the general quality of peer interactions within the classroom (further referred to as 'class climate') influences the effect that peer acceptance and number of friends have on academic outcomes. This idea stems from social context models which recognize that the group norms in a social context in which children interact modify the meanings of peer



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relations, and hence can generate different outcomes. For the present paper, we expected that poorly accepted students would feel more isolated in classes that are characterized by poor social behaviors than in classes with prosocial climates. In a prosocial climate, poor, average, and well-accepted individuals may differ less in relatedness than in classes that are characterized by poor social climates. Therefore, we assumed that class climate influences the strength of the association (i.e., moderates the association) between individualized measures of peer relations and relatedness (Bellmore et al., 2004).

Academic performance refers to excellence in all academic discipline. Steinberg (2005) posits that academic performance encompasses students' ability and performance; it is multi-dimensional; it is intricately associated to human growth and cognitive, emotional and social physical development. Academic performance also refers to how well a student is accomplishing his tasks and studies. There should be an interrelated relationship between peer group and academic performance. It was believed that student's academic performance correlates with the group he or she belongs. Peer Influence can be either positive or negative. If a student is influenced negatively by peer, it affects his or her academic performance. Nevertheless, stronger student do have an impact on their peers and actually help improve their overall academic performance. Conversely, positive peer influence on academic performance depends on person's self-identity, self-esteem and self-reliance. Peer influence can as well inspire student's academic vigor and motivation for achievement (Lashbrook, 2000).

Academic activities are directed towards ensuring that students gain mastery of educational objectives. In schools, the extent to which these objectives have been met is determined greatly by the interaction of peer groups which could possibly reflect in student's academic performance. Peer group play a large role in the social, emotional and academic development of students. Allen in Steinberg (2005) maintains that peer group influence begins at an early age and increases through the teenage years. Thus, understanding the prospects and challenges of peer group is crucial for the productivity of educational processes and the organizational design of school systems in order to improve student's academic performance.

Although quite a few studies focused on the linkages between peer relations and engagement, most of them did not investigate whether engagement truly mediated the link between peer relations and academic performance. Exceptions are studies of (Buhs et al. (2006) who showed that direct relations between peer relations and academic outcomes decreased in strength, but remained significant, when the mediators were entered into the equation, and of who did not find a mediational effect of engagement (Wentzel, 2003).

Focus on learning and learners are now a central theme in the educational policies and practices. While there are still huge needs for achieving higher grades as measured in accordance with the evaluation criteria, benefiting of students from their own learning, and involving them in assessing their own learning and the ability to make a decision (Crick et al., 2005). Peer assessment is an important element of designing learning environments in order for them to become more participatory among students, which can achieve concepts such as learning between peers, collaborative learning, and problem-solving based learning (Kollar & Fisher, 2010).

Peer assessment in the education field has been achieved at an increasing rate in recent decades, using it as an assessment tool (Gielen et al., 2011). It represents a system for learning built on the basis of that learning directed around the learner with the other in depending on effective learning, which focuses on the full integration of the student in the process of collaborative learning with peers under the supervision of the teacher (Thomas



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et al., 2011). Peer assessment is used to enhance learning as an effective way to increase motivation for students by engaging them in the evaluation process which has received attention in recent years from a number of international universities (Rimer, 2007) and to encourage peers to help each other to master the topic of learning.

Peer assessment also aims to describe the assessment processes that foster future learning and mitigate difficulties that are expected to occur. It also aims to transform students from mere receivers of knowledge from teachers to memorize and recall on tests to active learners and participants in learning and evaluation process, interact, search and explore, and reach to relationships between objects in order to generate new knowledge characterized by critical thinking and creativity. Peer assessment also helps to ensure a quality education for all students (Rogers & Threatt, 2000) and develop learner's self-direction as one of the quality measures in education (Papinczak et al., 2005).

Assessment procedures provided to students to assess their competencies by teachers test their content knowledge instead of focusing on areas such as problem-solving communication and critical thinking skills, teamwork, and respect others. These competencies are not assessed easily by the traditional forms of content-based measurements of knowledge (Lew et al., 2008). Thus, problem-solving based peer and learning assessments have received an increasing attention in the field of education. The European Commission of Higher Education emphasized the importance of focusing on peer assessment skills as a new perspective where student assessment shifts from traditional testing to giving students an active role in the learning and assessment processes.

This study is to investigate how peer groups influence academic performance in university level students. Researcher explored whether the positive or negative influence of peer group relationship on academic performance of students. This study is important for students in the university level to be aware of the significant role played by the peer groups in learning and for them to reason and be conscious of the group they join and move with it. Peer relationships, encompassing friendships, peer support networks, and social interactions, play a pivotal role in the lives of university students. These relationships often exert a significant impact on students' emotional well-being, social integration, and overall college experience. However, there is a gap in our understanding of the precise nature and extent of the influence of peer relationships on the academic performance of university students. Therefore, this study was conducted to fill these gaps

OBJECTIVES OF THE STUDY

1. To find out the impact of peer relationship on academic performance of university students.
2. To find out the impact of peer relationship on academic performance with respect of demographic variables.

RESEARCH METHODOLOGY

This study was quantitative in nature and descriptive survey method was adopted to conduct this research. The study adopted a quantitative research approach, primarily utilizing numerical data to analyze and draw conclusions about the impact of peer relationship and academic performance. This approach is chosen for its ability to provide statistical evidence and measure the strength and direction of the relationship. Descriptive research aims to accurately and systematically describe a population, situation or phenomenon. A descriptive research design can use a wide variety of research methods to



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investigate one or more variables. This research design is carefully developed to ensure that the results are valid and reliable. It is appropriate for research because it facilitates the assimilation of quantitative data by the researchers. The researchers used a survey questionnaire to investigate the views of students towards the impact of peer relationship on academic performance. Population is the target group from whom the data was collected. Researchers selected two universities (Women university of Azad Jammu and Kashmir, Bagh) and (Poonch University Rawalakot Kahuta campus) of AJ&K for this study. BS level students were taken from four departments (English, IR, economics and Education) from Women university of AJ&K Bagh and university of Poonch Kahuta campus. Researchers selected 450 respondents as sample of the study, according to Gay (2000) table of sample selection. Gay (2000) suggested if the population is 947, the size of 450 will be adequate. Researchers used simple random sampling technique and selected 450 students out of the 947. Questionnaire was used as data collection tool. Questionnaire was used as data collection tool. A close ended questionnaire was developed of five point likert type. The questionnaire was consisted of three sections: A and B. Section A contained demographic information; Section B consisted of 29 Likert statements about the measurement of impact of peer relationship on students' academic performance. Data was reliable as the value of Cronbach's Alpha was 0.865, which was quite significant for further study. The questionnaires were given to the sampled respondents by the researchers with explicit instructions on how to complete them. They were given a week to submit their replies. The researcher returned to the department on the designated day to collect all of the issued surveys. The researcher gathered and documented the information from the respondents to avoid any sort of conflict.

DATA ANALYSIS

Data analysis is important part in research. This study is quantitative in nature and the data was analyzed by using SPSS (Statistical Package for social sciences) software. In order to find out the impact of peer relationship on academic performance of student's simple linear regression and Pearson correlation was run.

Table 1. Pearson Correlation Coefficient between peer relationship and Academic Performance of Students

Variables	R	P
Academic performance		
Pearson Correlation	0.613**	.000
Peer Relationship		

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

Table 1 depicts that correlation coefficient (r) between peer relationship and academic performance of students is 0.613 which shows a significant relationship between two variables i.e., peer relationship and academic performance. The p value is ≤ 0.05 which



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means the relationship is statistically significant.

Table 2. Model Summary Regression about impact of Peer Relationship on Academic performance

R	R Square	Adjusted R Square
0.613	0.376	0.374

R-square value is 0.376 in table 2 This value indicates that the independent variable peer relationship, brings 37.6% change in dependent variable i.e., academic performance.

Table 3. ANOVA Results about Effect of Peer Relationship on Academic performance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	9767.806	1	9767.806	268.366	.000 ^b
Residual	16233.192	446	36.397		
Total	26000.998	447			

The table no 3 ANOVA Results shows that p value is 0 .000 which is less than 0.05, hence we say that there is a significant relationship between two variables Independent i.e., Peer relationship and dependent academic performance.

Table 4. Regression Coefficients for Effect of peer relationship of on Academic Performance of Students

Variables	Coefficients β	Beta	t	p
(Constant)	20.152		8.657	0.000
Peer relationship	0.602	0.613	16.382	0.000

Coefficient Table 4 shows significant relationship between peer relationship and academic performance. As $t=8.657$ and 16.382 $p=0.000$ as we can see that p value is less than 0.05 and t value is greater than 2 with expected positive sign which implies that peer relationship is positively related with academic performance. Whereas, positive beta value also shows



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that peer relationship has a positive effect on the academic performance of students.

Table 5. Model Summary Regression With Respect to Gender

Gender	R	R Square	Adjusted R Square
Male	0.444	0.197	0.189
Female	0.645	0.416	0.414

Table 5 depicts that R square value for male is 0.197 and Female=0.416, that means independent variable i.e., peer relationship explain 19.7% with respect male and 41.6% with respect female. Furthermore, The R square value for male is less than female.

Table 6. ANOVA Results with Respect to Gender

Gender		Sum of Squares	df	Mean Square	F	Sig.
Male	Regression	784.968	1	784.968	23.325	.000 ^b
	Residual	3197.053	95	33.653		
	Total	3982.021	96			
Female	Regression	9158.159	1	9158.159	248.594	.000 ^b
	Residual	12857.112	349	36.840		
	Total	22015.271	350			

The table no 6 ANOVA Results shows that p value is 0.000 which is less than 0.05, hence we say that there is a significant relationship between two variable Independent i.e., Peer relation and dependent academic performance with respect to gender.

Table 7 Coefficients with respect to gender

Gender	Coefficients β	Beta	T	P
Male	30.511	0.444	5.366	0.000
Female	17.898	0.545	6.973	0.000

Coefficient with respect to gender is found statistically significant) as shown in Table 4.7 t value for male=5.366, female=6.973 whereas p=0.000. As p-values is less than 0.05 and t-values is greater than 2 that means there was a significant relationship between Peer relation and academic performance with respect to gender

Table 8 Model summary with Respect Semesters

Semester	R	R Square	Adjusted R Square
2 semesters	.276 ^a	0.76	.067
4 semesters	.630 ^a	.397	.394
6 semesters	.641 ^a	.411	.404

R square value for 2nd, 4th and 6th semesters is recorded as 0.76, 0.397 and $s^2=41.1\%$ 0.397



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and 0.41 respectively, that means our independent variable i.e., peer relationship describes dependent variable with respect different semesters 76%, 63% and 64%.

Table 9. ANOVA Results with Respect to Semesters

Semester	Model	Sum of Squares	Df	Mean Square	F	Sig.
second semester	Regression	247.895	1	247.895	8.217	.005 ^b
	Residual	3016.772	100	30.168		
	Total	3264.667	101			
4 semesters	Regression	4965.371	1	4965.371	169.690	.000 ^b
	Residual	7549.440	258	29.261		
	Total	12514.812	259			
6 semesters	Regression	1949.090	1	1949.090	58.679	.000 ^b
	Residual	2790.166	84	33.216		
	Total	4739.256	85			

The table no 9 ANOVA Results shows that p value for different semesters is 0 .005, 0.000 and 0.000 respectively which are less than 0.05, hence we say that there is a significant relationship between two variable Independent i.e., Peer relation and dependent academic performance with respect to different semesters and there was not found any significant difference among the semesters with respect to semesters.

Table 10. Coefficient With Respect to Semesters

Semesters	Coefficients β	T	p
2 nd semester	47.159	9.480	.000
4 th semesters	18.744	6.034	.000
6 th semesters	18.913	4.453	.000

Coefficient table 10 shows significant relationship with respect to different Semester. As t value was 9.480, 6.034 and 4.453.000. Whereas p value is 0.00. As p-value is less than 0.05 and t value is greater than 2 which means there was significant relationship between peer relationship and academic performance with respect to different semesters. Furthermore, among the different semesters there was not found any significant difference.

Discussion

Present study was conducted to find out the effect of peer relationship on academic performance of students. Present study conclude that that peer group has a significant effect on academic performance of students in accordance with (Korir and Kipkemboi, 2014) who conclude that environment and peer influence made significant contribution to the students' academic performance. The present study was also aligned with (Wentzel, 2021) study, who examined systematically the evidence linking peer social acceptance to academic achievement. And concluded that a medium effect size suggests that peer social acceptance is related significantly and positively to academic achievement. Present analysis showed positive relationship between peer correlation and academic performance of students and this study aligns with previously conducted study by (Lubbers et al., 2006) analysis who examined whether peer relations within classrooms were related



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to students' academic progress. The results indicated although peer acceptance was associated with relatedness and engagement and increased academic performance. Present study results were account for (Ryan .2002) conclusion that value result in resistance to change, and low value result in receptiveness to change. Peer can influence everything about a student from the choice of what to wear, to engaging in drug related or other behavior and also on academic performance.

Conclusion

Peer relations play an important role in students' academics. Positive and good relationship among students develops positive social emotional skill. Present study was conducted to investigate effect of peer relationship on their academic performance.

On the basis of findings, it was concluded that there was a positive effect of peer relationship on the academic performance of students Furthermore there was not found any significant difference with respect to demographic variable (Gender, Program of study and Semesters)

Recommendations

1. It is recommended that teachers may motivate the students to develop positive relationship with peers.
2. Parents may motivated their children regarding their behavior. They should make sure their children are well monitored and they should encourage them to have friends that would have a positive influence on their learning both at home and at school.
3. School counselors may play a prominent and leading role in the matter of peer group influence by organizing lectures, seminars, and symposiums that can create positive awareness on influence of peer group on academic performance of undergraduate students.

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