

Factors Affecting graduate Students' Academic Achievement of **Tribhuvan University**

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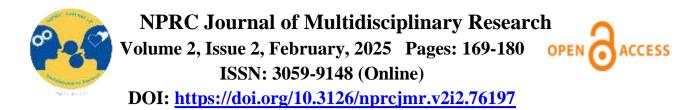
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Abstract

The present research study was design to investigate the factors affecting academic performance of graduate students of Tribhuvan university of Nepal. The variables under consideration were the academic performance (student's grades/marks) as a dependent variable and the gender, age, schooling, father/guardian social economic status, and residential area,



medium of schooling; tuition trend, daily study hours and accommodation trend were independent variables. The data were collected from 335 students through separate structured questionnaire from different collages of Tribhuvan University of Nepal using the simple random sampling technique. For analysis, correlation analysis, and descriptive analysis were used. The findings revealed that age, father/guardian social economic status and daily study hours significantly contribute the academic performance of graduate students.

Keywords: academic performance, medium of instruction, public sector, school education

Introduction

Students' academic gain and learning performance is affected by numerous factor including gender, age, teaching faculty, students schooling, father/guardian social economic status, residential area of students, medium of instructions in schools, tuition trend, daily study hour and accommodation as hostelries or day scholar. Many researchers conducted detailed studies about the factors contributing student performance at different study levels. <u>Graetz (1995)</u> suggested "A student educational success contingent heavily on social status of student's parents/ guardians in the society. <u>Considine and Zappala (2002)</u> noticed the same that parent's income or social status positively affects the student test score in examination. According to <u>Minnesota (2007)</u> "the higher education performance is depending upon the academic performance of graduate students. <u>Durden and Ellis quoted Staffolani and Bratti, (2002)</u> observed that "the measurement of student's previous educational outcomes are the most important indicators of student's future achievement, this refers that as the higher previous appearance, better the student's academic performance in future endeavors.

Lot of studies have been conducted in the area of student's achievement and these studies identify and analyze the number of factors that affect the academic performance of the student at school, college and even at university level. Their finding identifies students' effort, previous schooling, parent's educational background, family income, self-motivation of students, age of student, learning preferences and entry qualification of students as important factors that have effect on student's academic performance in different setting. The utility of these studies lies in the need to undertake corrective measures that improve the academic performance of graduate students. (Ali and Haider, 2013)

It is generally assumed that the students who showed better or higher performance in the starting classes of their studies also performed better in future academic years at degree level. Everyone can be surprised with this assumption if it could be proved scientifically. From the last two decades it has been noticed significantly that there is great addition in research literature and review material relating to indicators of academic achievement with much emphasis on this dialogue, whether traditional achievement measures of academic performance are best determinants of future academic gain at university or higher level or innovative measures. However, it is also observed that many of the researchers are not agree with this view point or statement. (Ali and Haider, 2013)



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<u>Reddy and Talcott (2006)</u> looks disagree with these assumptions that future academic gains are resolute by preceding performance. In their research on the relationship between previous academic performance and subsequent achievement at university level, they found that students learning or studying at graduate level and the score secured did not predict any academic achievement at university level. They also cited <u>Pearson and Johnson (1978)</u> who observed that on the whole grade association of only 0.28 between graduate level marks and university degree achievement. It is also confirmed in the study of <u>Oregon State University (2003)</u> on graduate admissions that normal measures of educational potential and academic performance such as high school GPA (Grade Point Average) scores showed only 30% of the deviation in initial or starting (first) year at college.

It is significant to note that even these studies disagree with earlier research that examined how prior accomplishments impact students' future academic performance; they did, however, confirm that admission scores have a very weak correlation with university-level academic performance. Additionally, <u>McDonald et al. (2001</u>) proposed that graduate-level study scores continue to outperform any other single measure of cognitive aptitude in predicting university achievement. Students' academic success is also correlated with the socioeconomic status of their parents, which includes their income, professional and academic credentials, and occupational connections.

Numerous research' findings supported the idea that a student's academic success depends on the socioeconomic status of their parents. Students from greater socioeconomic backgrounds will therefore perform better than those from lower socioeconomic backgrounds.

"A student's social and economic standing is typically established by integrating the educational background, occupation, and income level of their parents" (Jeynes, 2002). It should come as no surprise that socioeconomic class is one of the primary factors examined when predicting academic performance in the numerous research studies on academic achievement. A study on the socioeconomic status of students' parents was carried out by Graetz (1995), who came to the conclusion that parents' socioeconomic status has a significant influence on students' academic performance, is the primary cause of educational disparities among students, and that students' academic success is highly dependent on their parents' socioeconomic status.

In their study on the impact of social and economic disadvantage on schoolchildren's academic performance, <u>Considine and Zappala (2002</u>) shared the same opinions as <u>Graetz (1995</u>) and found that higher level success in the future is unquestionably strengthened when parents or guardians have social, educational, and economic advantages. However, it is also seen that these parents provide their kids with adequate psychological and emotional support by creating a positive learning environment that fosters confidence and the development of success-oriented abilities.

In contrast, <u>Pedrosa et al. (2006)</u> found that students from disadvantaged socioeconomic and educational backgrounds fared better than those from more affluent and educational backgrounds in their study on social and educational backgrounds. This phenomenon was given



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the moniker "educational elasticity." It goes without saying that different nations have distinct standards for classifying socioeconomic standards based on their own norms and beliefs. Developed countries will have different standards for poor socioeconomic status than do developing countries, and developing and under developing countries will also have various standards.

Families' monthly or yearly income and expenses have a significant impact on the academic and learning possibilities available to children as well as their prospects of succeeding in school. Additionally, he noted that students from low-income families typically attend schools with lower funding levels because of residential stratification and segregation, which lowers student achievement motivation and increases the likelihood of educational failure in subsequent endeavors (Escarce, 2003). According to Considine & Zappala (2002), children from low-income families exhibit more typical learning outcomes, such as low literacy, low retention rates, behavioral issues in school, more academic difficulties, and a generally negative attitude toward learning and education.

This comment from Eamon strengthens the position of Considine and Zappala. In comparison to other kids or their peers, Eamon (2005) states that students from low socioeconomic backgrounds typically do poorly in school and receive lower grades. It is also believed that the quality and type of educational institution where students receive their education has a significant impact on their learning outcomes and academic performance. The boundaries of pupils' learning outcomes are established by the educational setting of the school they attend. Sparkles (1999), cited by Considine and Zappala (2002), shown that the school climate and teachers' expectations of their pupils can have a significant impact on student achievement.

The majority of teachers in underprivileged schools or those lacking basic amenities frequently have low expectations for their pupils' performance, and when kids are aware that their teachers have low expectations for them, they do poorly.

Although <u>Kwesiga (2002</u>) acknowledged that a student's performance is also impacted by the school they attended, he also asserted that a school's quality is typically determined by the quantity of facilities it provides, which in turn influences the achievement and performance of its pupils. According to <u>Sentamu (2003</u>), schools have an impact on how the curriculum is organized, how teachers and students are taught, and how everything is ultimately evaluated. The idea that schools have a significant impact on students' academic achievement and educational attainment was accepted by all of these educators and experts.

The primary reason why students from elite schools are expected to do well is because these institutions typically have a wealth of resources and facilities. According to some experts, school ownership and the resources available in schools do have an impact on students' performance. School ownership, facility provision, and resource availability are significant structural elements of the school, according to <u>Crosne and Elder (2004</u>). Private schools outperform public schools because of their superior funding, smaller class sizes, serious ownership, driven faculty, and access to tools like computers. Their pupils' educational attainment, facilities, and supplementary budgetary resources have an impact on performance.



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It's also great that students in Punjab's government schools, colleges, and universities are given laptops by the Punjab government so they may communicate with people around the world and learn about the newest advancements. It has been determined that pupils' academic performance and achievement are significantly impacted by the kind of school they attend. In their 2007 study on the impact of high school attendance on university success, Miller and Birch compiled the opinions of numerous researchers and educationists.

<u>Ali and Haider (2013)</u> revealed that age, father/guardian social economic status and daily study hours significantly contribute the academic performance of graduate student.

Research Methodology

This work has the purpose of exploring the factor contributing to the academic performance of the graduate students. To meet the objectives of the study, exploratory and causal comparative research design has been used.

A linear model of graduate student performance was created for this investigation. Academic performance among graduate students was considered a dependent variable, whereas independent variables included gender, age, academic discipline, education, father/guardian social economic status, residential area, , study hour. One three hundred thirty five graduate students from the Tribhuvan University make up the sample.

The sample was chosen from the specified demographic using a non-probability judgmental sampling. To get the real answers, the researcher visited and clarified the respondents in person and completed the questionnaires. Because there is a big and literate population and little time for data collection, the researcher uses closed-ended questionnaires. Microsoft Excel 2016 and SPSS 23.0 (version) were used to construct, sort, modify, classify, and code the questionnaire data. Using SPSS's built-in t-test function, the hypothesis that the academic performance of Tribhuvan university graduate students differs by gender is tested.

Reliability Analysis

Reliability analysis		
Cronbach's alpha	N of items	
.440	4	

The questionnaire's overall Cronbach alpha was 0.44, which is normal and accounts for the 44% of questions that are deemed reliable.

Table: 1: Previous Academic Performance of students						
particular	Exce	ellent	Go	od	Not	rmal
My previous academic performance is	320	95.2%	1	.3%	13	3.9%

Students with 95.2% excellent results at the previous level are shown in Table 1. Just 13 pupils had a typical academic background, with the next highest percentage (0.3%) having a good background.



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Table: 2: Family background (income)					
particular	high	medium			h for my
My family income is enough	28	8.3% 40	11.9%	study 267	79.5%

The majority of students who can afford higher education come from stable financial backgrounds. There are 267 students in this group, 40 of whom come from a medium-income background and 28 of them come from a higher-income one.

. Table: 3: previous academic b	back ground		
particular	More than	More	Less than 3.
	3.5 GPA	3.00GPA	GPA
I have achieved	58 17.3%	251 74.7%	26 7.7%

According to Table No. 3, 17.3 percent of students had academic performance above 3.5 GPA, and 74.7 percent of students had earned more than 3 GPA in the previous year. Merely 7.7 percent of the respondents have a GPA below 3.00.

Table: 4: parents' profession								
particular	Jobholder		businessman		farming		other	
My parents' occupation is	42	12.5%	251	74.7%	42	12.5%	-	-

Table 4 shows that 74.7 percent of parents operate their own business, with 12.5 percent farming, and 12.5 percent of parents work a job. The majority of parents work in the business sector and earn enough money to support their kids' education.

Table: 5: college environment and	infrastruc	eture		
	best		good	
My college environment and infrastructure	183	54.5%	152.	45.2%

The student's perception of the college environment is displayed in Table 5. Based on the responses, 183 students believe that their environment is the best, while 152 students think that their infrastructure and surroundings are good.

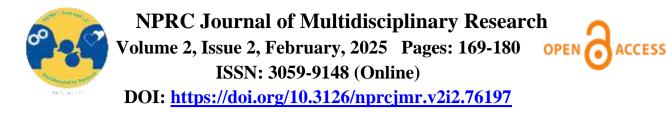


Table: 6: previous academic background

	Hig	gh	Med	ium	Low
	qua	lity			quality
	95	28.3%	240	71.4%	
My previous academic institution is					
Table 6 shows that 95 students indicated	that	their prio	or scho	ool was v	very qualitative, whereas

Table 6 shows that 95 students indicated that their prior school was very qualitative, whereas 240 students indicated that their school was medium.

Table 7. Gen	der profile of th	ne respondents				
	Male		Female		Total	
Gender	110	32.7%	225	67.2%	335	100%

According to Table 7, there are 225 female students and 110 male pupils. 32.7 percent of men and 67.2 percent of women answered the survey.

Table: 8: Previous school background				
	Public		Private	
school	145	43.2%	190	56.5%

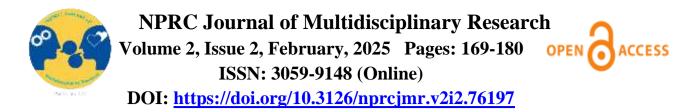
Table 8 shows that the certificate was obtained from a private institution. Of the responders, 145 were from public schools and 190 were from private schools.

Table: 9: Locality					
	Urban		Remote		
locality	222	68.1%	113	336%	
Table 9 shows that 113 students came f	rom rural area	while	222 stude	nte came	from

Table 9 shows that 113 students came from rural areas while 222 students came from metropolitan areas.

Statements	Highly disagreed		Disagreed		Neutral		Agreed		Highly Agreed	
The teaching faculties in our college are highly qualified	13	39	-	-	181	53.5	98	29.2	43	43
I have spent more than 5 hours in study	13	3.9	-	-	169	50.3	152	45.2	1	3
I have tuition trend from my schooling	15	4.5	-	-	179	53.3	44	13.1	97	29.0
My parent's social status is recognized by the society	167	49.7	72	21.4	42	12.5	27	8.0	14	4.2

Table 10 shows that 181 respondents, or 53.5 percent, had no opinion about the qualifications of the teaching faculty. 141 (98+43) of the total respondents concurred that their faculty



members are highly qualified. 169 (50.3%) of the respondents were neutral about how many hours they study each day, whereas 153 (152+1) agreed that they study for more than five hours. 141 respondents (44+97) are neutral about the tuition trend, whereas 179 respondents are neutral.

		1	2	3	4	5	6	7	8	9	10
The teaching faculties in our college are highly qualified (1)	r	1									
I have spent more than 5 hours in study (2)	r	.673* *	1								
I have tuition trend from my schooling (3)	r	.448* *	.320* *	1							
My parent's social status is recognized by the society (4)	r	010	017	.093	1						
my previous academic performanc e is (5)	r	097	.196* *	.286****	.163* *	1					
My family income is enough (6)	r	.184* *	.069	.331* *	090	.099	1				
I have achieved (7)	r	.078	.186* *	.196* *	096	.438* *	.073	1			
My parent has the occupation (8)	r	.395* *	017	.354* *	067	.399* *	.264* *	.299* *	1		



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My college environmen t and Instructors	r	.207* *	.244* *	.204* *	.284*	.191* *	.143* *	005	.012	1	
is⊗9) My previous Academic Institution	r	.029	.080	.223* *	.197* *	.132*	.150* *	.232* *	.185* *	.02 8	1
is (10) **. Correlation	on is s	significan	t at the 0.0)1 level (2	-tailed).						

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

The relationship between the variables under investigation is shown in Table No. 11. Parents' social standing and prior academic achievement are negatively correlated with the attributes and credentials of their educational staff. Students' reading hours are negatively correlated with their parents' social standing. The social standing of their parents is negatively correlated with family income as well. There is a negative correlation between their parents' work, academic success, and social standing. There is a positive correlation between the student's academic achievement and other factors.

	Coefficients									
Table no 12. Impact of Gender, School, and Locality on academic performance										
Model		Un-standardiz	zed Coefficients	Standardized Coefficients						
1		В	Std Error	Beta	t	Sig				
(0	Constant)	1.946	.140		13.892	.000				
G	ender	006	.069	005	083	.934				
Se	chool	.007	.065	.007	.103	.918				
L	ocality	.027	.061	026	445	.657				

a. Dependent variable: Academic Achievements

Table 12 shows the kids' academic achievement together with their gender, school, and locality and how these factors affect academic success. While the academic success of graduate students is influenced by their previous school, gender and location have little bearing on academic achievement.

Analysis and Discussions

There were 110 (32.7) male respondents and 225 (67.2) female respondents from Tribhuvan University, according to the descriptive research, and their responses were useful for the study. 68.1% and 33.6% of the respondents, who are from the urban (222) and distant (113) areas,



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respectively, answered the questionnaire. There are 145 (43.2%) respondents from public schools and 56.5% (190) respondents from private schools among the total respondents.

12.6% of the respondents' parents are employed, 74.7 percent are business owners, and 12.5% have a farming background. The findings show that 58% of students obtained a GPA of at least 3.5, 251 (74.7%) obtained a GPA of at least 3.00, and less than 7.7 percent obtained a GPA of less than 3.00.

Of all respondents, 54.5 percent thought their environment was the best, and 45.2 percent said their environment was good for helping them achieve their academic goals. Regarding their prior academic history, 28.3 percent of respondents said that their performance was of excellent quality, while 71.4 percent said that their performance was of medium grade.

The respondents previous of 145 (43.2%) are from the public school and 190 (50..0%) have the private schools where as 68.1% (222) respondents come from the urban area and 33.6% (113) come from the remote area.

According to 141 respondents, the teaching faculty at the college is qualified, whereas 181 respondents have no opinion about the faculty's attributes. According to those who have a neutral opinion on the reading hour (169) and 153, they read for more than five hours per day. In their survey, 141 students acknowledged that they had a tuition trend, whereas 179 respondents were neutral about it. 41 respondents have a high social standing, whereas 239 respondents, or 71.34% of the sample, are indifferent, indicating that they disagree with their parents' social position.

SPSS 23 version has been used to calculate the regression analysis. We used the test score as a measure of the academic achievement of the students and the following independent variables: gender, age, schooling, faculty of study, residential area, father/guardian social economic status, medium of education, tuition, study hours, and housing. We determine that age, income, and hour are statistically significant after fitting the model (see section 4.2). Age, income, and hourly wage are the elements that the government or university should consider, according to this. Other factors may potentially have an impact on test scores and academic success, but since they are not statistically significant, we should not include them in the model.

The correlation research shows that graduate students' capacity to perform better is highly impacted by age, money, and hours worked. We determine how closely age, income, and hour are related to the dependent and independent variables. The results show that age and test score are negatively correlated (see section 4.3). This is due to the fact that most Tribhuvan University students get a GPA of at least 3.00. Next is the income level of the parents who are supporting their children.

We discover a positive correlation between income and student performance (test score). This implies that parents with high incomes are the reason behind good test results. Study time is one of the most important factors affecting a student's performance. There is a larger positive correlation between test scores and study hours than between age and income. In summary, we rate the degree of link between academic achievement and a variety of independent variables



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as follows: hours are ranked third, income is ranked second, and age is ranked first, all of which show positive correlation.

We look at whether the following variables—gender, educational background, residential location, style of study, and housing—have an impact on the academic performance of graduate students at Tribhuvan University: Our hypothesis states that graduate students, regardless of their gender (male or female), educational background (private or public), and living place (rural or urban), perform similarly academically on average. The academic performance of graduate students varies on average based on their residential location (rural or urban), educational background (private or public), and gender (male or female). Since the two-tailed significant values (p-values = 0.771, =0.391, and =0.12) are higher than 5%, we do not rule out the null hypothesis and draw the statistical conclusion that graduate student performance is unaffected by gender, housing, or residential location.

We statistically conclude that graduate student performance varies with education level and medium since the two-tailed significant values (p-values = 0.02 and = 0.007) are less than 5%.

Conclusion

Study hours, prior academic success, the institution environment, and the faculty all have an impact on the academic achievement of Nepalese graduate students. The social standing of the parents and their economic standing are negatively correlated. The majority of students believe that the college setting and faculty are of higher caliber. Their performance is not positively impacted by their gender or location. Graduate student performance was also found to be favorably correlated with the parents' occupation and tuition trend.

Recommendation

Since this topic is unique to its results, suggestions may or may not be externally valid. We recommend that the study be conducted on a large scale so that its conclusions can be applied across the Kathmandu Valley.

References

- Ali, A., & Haider, S. Z. (2017). Developing a validated instrument to measure teachers' job performance: Analyzing the role of background variables. *Journal of Educational Research*, 20(1), 21. https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Graetz+%281995%29 &btnG=
- Bratti, M., & Staffolani, S. (2011). A microeconometric analysis of female labour force participation in Italy. In *Non-standard Employment and Quality of Work: the Case of Italy* (pp. 25-37). Heidelberg: Physica-Verlag HD.
- Considine, G., & Zappala, G. (2002). Influence of social and economic disadvantage on the academic performance of school students in Australia. *Journal of Sociology*, *38*(2), 129–148.



DOI: https://doi.org/10.3126/nprcjmr.v2i2.76197

- Crosnoe, R., Monica, K. J., & Elder, G. H. Jr. (2004). School size and the interpersonal side of education: An example of race/ethnicity and organizational context. *Social Science Quarterly*, 85(5).
- Durden, G. C., & Ellis, L. V. (1995). The effect of attendance on student learning in principles of economics. *American Economic Review*, 85(2), 343–346.
- Eamon, M. K. (2005). Social demographic, school, neighborhood, and parenting influences on academic achievement of Latino young adolescents. *Journal of Youth and Adolescence*, 34(2), 163–175.
- Escarce, J. J. (2003). Socioeconomic status and the fates of adolescents. *PubMed Central*. Retrieved September 27, 2007, from http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid
- Graetz, B., & Shute, R. (1995). Assessment of peer relationships in children with asthma. *Journal of Pediatric Psychology*, 20(2), 205-216.
- Jeynes, W. H. (2002). Examining the effects of parental absence on the academic achievement of adolescents: The challenge of controlling for family income. *Journal of Family and Economic Issues*, 23(2).
- Kwesiga, C. J. (2002). *Women's access to higher education in Africa: Uganda's experience.* Kampala: Fountain Publishers Ltd.
- McDonald, A. S., Newton, P. E., Whetton, C., & Benefield, P. (2001). *Aptitude testing for university entrance: A literature review*. National Foundation for Educational Research.
- Minnesota Measures. (2007). *Report on higher education performance*. Retrieved May 24, 2008, from <u>http://www.opencongress.org/bill/110.s/642/show-139k</u>
- Miller, W. P., & Birch, R. E. (2007). The influence of type of high school attended on university performance. Retrieved December 3, 2008, from http://www3.interscience.wiley.com/journal/118538313
- Oregon State University. (2003). *Graduate admissions policy proposal*. Retrieved November 23, 2006, from

http://eepm.orst.edu/dept/senate/committees/aac/agen/reports/20030115.html

- Pearson, P. D., & Johnson, D. (1978). *Teaching reading comprehension*. New York: Holt, Rinehart & Winston.
- Pedrosa, R. H. L., Dachs, N., Maia, A., & Andrade, C. Y. (2006). Educational and social economic background of graduates and academic performance: Consequences for affirmative action programs at a Brazilian research university. Retrieved September 9, 2007, from <u>http://www.comvest.unicamp.br/paals/artigo2.pdf</u>
- Reddy, P., & Talcott, J. (2006). Predicting university success in psychology: Are subjectspecific skills important? Retrieved July 4, 2008, from http://www.aston.ac.uk/downloads/ihs/peelea/huw2006p.pdf

Sanderson, R. A. (2003). Oregon State University: 2003 your first college year survey results.

- Sentamu, N. P. (2003). School's influence on learning: A case of upper primary schools in Kampala & Wakiso Districts.
- Sparkes, J. (1999). *Schools, education and social exclusion* (CASE Paper 29). Centre for Analysis of Social Exclusion, London School of Economics.