Impact of Teacher's Leadership Style on Student's Academic Performance: a case of Business school

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DOI: https://doi.org/10.17102/bjrd.rub.11.1.027

Abstract

The success of students depends upon the behaviour of the teachers. The leadership quality of a teacher is an integral part of the success and achievement of the student. This study aims to find the impact of teacher leadership on student academic performance. A hypothesis testing research design is adopted, and data is collected from 400 students of the Business school through a well-designed questionnaire. Data analysis is done with SPSS 21. Results reported a significant impact of teachers' leadership on students' academic performance. It is also reported that both types of leadership have a significant and positive influence on students. At the same time, better influence is reported for teachers' transformational leadership on academic performance than transactional leadership. It is recommended that teachers use leadership qualities with students and influence their performance and behaviour for a bright future.

Keywords– Transformational leadership, Transactional leadership, Academic Performance, Teacher.

Introduction

Modern education is acclaimed for being pivotal in bringing Bhutan to the present stage, which started in 1913 (Sapam, Singh and Ratna, 2019). In a competitive and dynamic world, teacher leadership plays a vital role in shaping students' lives. Teacher leadership may positively or negatively impact the growth and development of students' performance. The part of teacher's behaviour is vital to the success of students and achievement (Barr and Duke, 2006; Danielson, 2007a). It is believed that teachers' have a significant impact on students' performance. Hence influential leaders are considered a major priority. Teacher Leadership plays an essential factor and vital role in shaping any student. The success or failure of students depends largely on the quality of their leaders. Behind every successful student, there is always a hand of influential leaders who can mobilize all the resources to improve their students'

performance. When students are not performing up to the required standard or performance is low, the blame is usually put on their respective teachers.

The impact that teacher leadership has on student effectiveness is still unclear. However, the poor academic performance or low achievement of a student is impacted by the leadership styles possessed by the teacher to some extent. Therefore, this research examines the role of teacher leadership on academic performance.

Significance of the study

The plethora of studies conducted on teaching and learning effectiveness in Bhutan like -Ratna, Dhakal and Dhakal (2021) reported a significant and positive impact of online teaching on academic performance based on responses from 227 students pursuing B. Com in Bhutan. On the other hand, Lhamo and Ratna (2021) researched knowledge management practices in Bhutan and reported that motivation to share knowledge and opportunities to share do not significantly impact performance. However, the teacher's role of leadership quality in student performance was a gap.

This study will widen the scope of knowledge about how students of business studies would achieve academic and quality output through the behavioural aspect of a teacher. Determining a positive link between these two constructs will provide insight into leadership behaviours to increase student achievement. Teachers must take a more active role in school leadership and restructuring (Wasley, 1991). This study will provide the impact teacher leadership has on the effectiveness of student academic performance. This study would be relevant for students, teachers and colleges.

Literature review

Barr and Duke (2006) defined teacher leadership "as the process by which teachers influence the student and other school community members to improve teaching and learning practices". Danielson (2007b) stated, "Teacher leaders call others to action and energize them to improve teaching and learning". York, Barr and Duke (2004) defined "teacher leadership in terms of impact on colleagues and other school stakeholders, ultimately improving the teaching and learning practices to improve student achievement".

According to Bouckaert and Halligan (2008), there is no agreement on a single definition of performance, and in many studies, the meaning remains only implicit. Meyer (2002) defined "performance as what people and machines do: it is their functioning and accomplishments". Berman (2006) explained, "performance as both

effective and efficient use of resources to achieve results". Bouckaert and Halligan (2008) argued that "performance is a tangible operationalization of results".

According to Murphy (2005), teacher leadership is relatively new, and the linking of teacher leadership to individual student achievement in turnaround schools is extremely rare. York, Barr and Duke (2004) suggested improving teaching and learning practices by creating positive learning relationships between teachers and students, ultimately resulting in high student learning and achievement levels. Coburn and Russell (2008) propose that a key strategy for impacting teacher social networks that promote improvements in curricular practices is to foster expertise in teacher leaders. Wahlstrom and York-Barr (2011) proposed, "the work of leadership is to create the conditions that support continuous professional learning that result in improved classroom practice such that students engage and learn at high levels". Beachum and Dentith (2004) analyzed several interview responses that led them to suggest that teacher leadership could positively affect student perceptions and performance. "Educational outcomes depend more on the quality of the teacher a student is assigned to than on any other factor outside of the home" (Jacobs, 2012, p. 11). Bruggencate, Luyten, Scheerens, and Sleegers (2012) found evidence in their research that suggested: "the learning environment teachers create in their classroom can affect the degree students like to be at school and are engaged with school and their performance" (p. 721). Anderson (2017) revealed that transformational leadership styles enhanced performance in business organizations and educational settings. Nurtjahjani et al. (2020) reported that transformational leadership effectively maximises the lecturer's performance.

Research Methodology

Research Objectives

- To study the perceptual difference between transformational and transactional leadership of teachers to students' demographic variables.
- Impact of teachers' leadership (Transformational and Transactional) on Students 'Academic Performance of GCBS.

Research Hypotheses

H_1: There is a significant perceptual difference between transformational and transactional leadership of teachers and academic performance to the gender of students.

H_2: There is a significant perceptual difference between transformational and transactional leadership of teachers and academic performance to the age of students.

H_3: There is a significant perceptual difference between transformational and transactional leadership of teachers to the major of students.

H_4: There is a significant perceptual difference between transformational and transactional leadership of teachers and academic performance in the year of students.

H_5: There is a significant impact of teachers' transformational leadership on students' academic performance.

H_6: There is a significant impact of teachers' transactional leadership on students' academic performance.

H_7: There is a significant impact of teacher leadership on students' academic performance.

Research Design- Hypothesis testing research design adopted for this study. Research site - students of Gedu College of Business Studies, Gedu, Chukha.

Sampling techniques – convenient sampling

Data Collection procedures – A well-design questionnaire is used for data collection.

Data Analysis – SPSS 21.

Instruments – questionnaire consists of 10 items for each leadership style - Transformational and Transactional leadership and ten items for students' academic performance. In addition, respondents rated a 5-point scale from Strongly Disagree, Disagree, Neutral, Agree and Strongly Agree.

Data Analysis and Interpretation

Sample description

The sample is introduced in terms of demographic factors before the next level of analysis.

Table 1. Sample description

Demographic	Type	Frequency	Percent	Cumulative Percent
Gender	Male	203	50.8	50.8
	Female	197	49.3	100.0
	Total	400	100.0	
Age	16-20	86	21.5	21.5
	21-25	302	75.5	97.0
	26-30	12	3.0	100.0
	Total	400	100.0	
Major	Finance	115	28.8	28.8
	Accounting	58	14.5	43.3
	Marketing	47	11.8	55.0
	HRM	38	9.5	64.5
	Common Foundation	142	35.5	100.0
	Total	400	100.0	
Year	1st year	142	35.5	35.5

	2nd year	113	28.3	63.8
	3rd year	145	36.3	100.0
	Total	400	100.0	

From table 1, it is inferred that almost equal participation is there from male and female students. The highest number of students is 21-25 (75%), and the highest number of responses are from common foundation, followed by finance as a major. The highest number of respondents are from 3 years followed by 1st year then 2nd-year students.

Reliability Analysis

It is conducted to test the reliability of the instrument used in this study.

Table 2. Reliability Statistics

S.N.	Variable	No. of Items	Cronbach Alpha
1	Transformational Leadership	10	.803
2	Transactional Leadership	10	.725
3	Academic Performance	10	.776

In table 2, The value of Cronbach Alpha is above the recommended value of .7 (Cronbach,1951). Therefore, it is interpreted that the instruments used for the study variable are reliable.

Test of difference - This section aims to study the perceptual difference towards study variable – transformational leadership, transactional leadership and academic performance of students to relevant demographic factors of respondents.

Comparative means with gender

Independent sample t-test is conducted to study the difference in study variables with respect to gender of students.

Table 3. Group Statistics

Variable	Gender	N	Mean	Std. Deviation	Std. Error Mean
Transactional Leadership	Male	203	3.459	.768	.0539
	Female	197	3.606	.644	.0459
Transformational Leadership	Male	203	3.231	.543	.0381
	Female	197	3.122	.478	.0341
Academic Performance	Male	203	3.443	.623	.0437
	Female	197	3.545	.488	.0347

From table 3, it is inferred that female students have a slightly high mean in case transactional leadership and academic performance while male students perceived slightly high in transformational leadership.

Table 4. Independent Samples Test

Variable	Variance	Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Transactional Leadership	EVA	3.776	.053	-2.076	398	.039	-.147	.071	-.287	-.007
	EVNA			-2.081	389.869	.038	-.147	.070	-.286	-.008
Transformational Leadership	EVA	1.034	.310	2.130	398	.034	.109	.051	.008	.209
	EVNA			2.134	394.305	.033	.109	.051	.008	.209
Academic Performance	EVA	3.680	.056	-1.816	398	.070	-.101	.056	-.212	.008
	EVNA			-1.822	381.112	.069	-.101	.055	-.211	.008

[Note: EVA- Equal variances assumed & EVNA - Equal variances not assumed]

The value of p is less than .05 in the case of transactional leadership and transformational leadership, while it is more than .05 in academic performance; it is inferred that there is a significant perceptual difference in both types of leadership between males and females. In transactional leadership, female students have a significantly high meanwhile male student perceived slightly high in transformational leadership. Therefore, the proposed alternate hypothesis $\mathbf{H_1}$ is partially accepted; it means there is a significant perceptual difference between transformational and transactional leadership of teachers and the gender of students.

Comparative mean with Age

One-way Anova test is conducted to study the difference in study variables to the age group of students.

Table 5. Descriptive statistics

Variable	Age Group	N	Mean	Std. Deviation	Std. Error
Transformational Leadership	16-20	86	3.514	.800	.086
	21-25	302	3.530	.696	.040
	26-30	12	3.691	.439	.127

	Total	400	3.531	.713	.035
Transactional Leadership	16-20	86	3.068	.521	.056
	21-25	302	3.198	.508	.029
	26-30	12	3.450	.505	.145
	Total	400	3.177	.514	.025
Student's Academic Performance	16-20	86	3.511	.603	.065
	21-25	302	3.481	.553	.031
	26-30	12	3.675	.497	.143
	Total	400	3.494	.562	.028

In table 5, a slight difference is reported in the mean towards the study variable with respondents of different age groups.

Table 6. ANOVA result with age group

		Sum of Squares	df	Mean Square	F	Sig.
Transformational Leadership	Between Groups	.335	2	.167	.328	.721
	Within Groups	202.692	397	.511		
	Total	203.027	399			
Transactional Leadership	Between Groups	2.038	2	1.019	3.899	.021
	Within Groups	103.754	397	.261		
	Total	105.792	399			
Student's Academic Performance	Between Groups	.465	2	.232	.734	.481
	Within Groups	125.781	397	.317		
	Total	126.246	399			

In table 6, the value of p is less than .05 in the case of transactional leadership (.021), which means there is the possibility of having significant differences among the different age groups.

Table 7. Multiple Comparison table

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Transformational Leadership	LSD	16-20	21-25	-.016	.087	.850	-.188	.155
			26-30	-.177	.220	.420	-.610	.255
		21-25	16-20	.016	.087	.850	-.155	.188
			26-30	-.161	.210	.444	-.574	.252
		26-30	16-20	.177	.220	.420	-.255	.610
			21-25	.161	.210	.444	-.252	.574
Transactional Leadership	LSD	16-20	21-25	-.129*	.062	.039	-.252	-.006
			26-30	-.381*	.157	.016	-.691	-.071
		21-25	16-20	.129*	.062	.039	.006	.252
			26-30	-.251	.150	.095	-.547	.043
		26-30	16-20	.381*	.157	.016	.071	.691
			21-25	.251	.150	.095	-.043	.547
Student's Academic Performance	LSD	16-20	21-25	.029	.068	.665	-.105	.165
			26-30	-.163	.173	.347	-.504	.177
		21-25	16-20	-.029	.068	.665	-.165	.105
			26-30	-.193	.165	.244	-.518	.132
		26-30	16-20	.163	.173	.347	-.177	.504
			21-25	.193	.165	.244	-.132	.518
*. The mean difference is significant at the 0.05 level.								

The value of p is less in the case of transactional leadership among two pairs of age groups. Only that age 16-20 is significantly different from 21-25 and 26-30. No significant difference is reported for any other pair for any study variables (Table 7). Thereby, the proposed alternate hypothesis **H2 is partially accepted.**

Comparative means with Major

One-way Anova test is conducted to study the difference in study variables to major of students.

Table 8. Descriptive statistics

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Transformational Leadership	Finance	115	3.552	.728	.067	3.417	3.686
	Accounting	58	3.522	.728	.095	3.331	3.713
	Marketing	47	3.685	.518	.075	3.532	3.837
	HRM	38	3.357	.697	.113	3.128	3.587
	Common Foundation	142	3.514	.751	.063	3.390	3.639
	Total	400	3.531	.713	.035	3.461	3.601
Transactional Leadership	Finance	115	3.178	.535	.049	3.079	3.277
	Accounting	58	3.287	.445	.058	3.170	3.405
	Marketing	47	3.297	.541	.078	3.138	3.456
	HRM	38	3.313	.616	.099	3.110	3.515
	Common Foundation	142	3.056	.461	.038	2.979	3.132
	Total	400	3.177	.514	.025	3.127	3.228
Student's Academic Performance	Finance	115	3.532	.582	.054	3.424	3.639
	Accounting	58	3.467	.501	.065	3.335	3.599
	Marketing	47	3.512	.449	.065	3.380	3.644
	HRM	38	3.373	.662	.107	3.156	3.591
	Common Foundation	142	3.500	.576	.048	3.404	3.595
	Total	400	3.494	.562	.028	3.438	3.549

In table 8, a slight difference is reported in the mean towards the study variable with respondents of different majors.

Table 9. ANOVA result with major

		Sum of Squares	df	Mean Square	F	Sig.
Transformational Leadership	Between Groups	2.348	4	.587	1.155	.330
	Within Groups	200.679	395	.508		
	Total	203.027	399			
Transactional Leadership	Between Groups	4.172	4	1.043	4.054	.003
	Within Groups	101.620	395	.257		
	Total	105.792	399			
Student's Academic Performance	Between Groups	.781	4	.195	.615	.652
	Within Groups	125.465	395	.318		
	Total	126.246	399			

In table 9, the value of p is less than .05 in the case of transactional leadership (.003), which means there is a possibility of having significant differences among different majors taken by students.

Table 10. Multiple Comparison table

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Transformational Leadership	LSD	Finance	Accounting	.029	.114	.796	-.195	.255
			Marketing	-.132	.123	.282	-.375	.109
			HRM	.194	.133	.146	-.067	.456
			Common Foundation	.037	.089	.676	-.138	.213
		Accounting	Finance	-.029	.114	.796	-.255	.195
			Marketing	-.162	.139	.246	-.437	.112
			HRM	.164	.148	.269	-.127	.457
			Common Foundation	.007	.111	.945	-.210	.226
		Marketing	Finance	.132	.123	.282	-.109	.375
			Accounting	.162	.139	.246	-.112	.437
			HRM	.327*	.155	.036	.021	.632
			Common Foundation	.170	.119	.156	-.065	.406
		HRM	Finance	-.194	.133	.146	-.456	.067
			Accounting	-.164	.148	.269	-.457	.127

			Marketing	-.327*	.155	.036	-.632	-.021
			Common Foundation	-.156	.130	.229	-.412	.099
		Common Foundation	Finance	-.037	.089	.676	-.213	.138
			Accounting	-.007	.111	.945	-.226	.210
			Marketing	-.170	.119	.156	-.406	.065
			HRM	.156	.130	.229	-.099	.412
Transactional Leadership	LSD	Finance	Accounting	-.109	.081	.180	-.270	.050
			Marketing	-.119	.087	.174	-.292	.053
			HRM	-.134	.094	.156	-.321	.051
			Common Foundation	.121	.063	.056	-.003	.247
		Accounting	Finance	.109	.081	.180	-.050	.270
			Marketing	-.009	.099	.921	-.205	.185
			HRM	-.025	.105	.812	-.233	.182
			Common Foundation	.231*	.079	.004	.076	.387
		Marketing	Finance	.119	.087	.174	-.053	.292
			Accounting	.009	.099	.921	-.185	.205
			HRM	-.015	.110	.890	-.232	.202
			Common Foundation	.241*	.085	.005	.073	.409
		HRM	Finance	.134	.094	.156	-.051	.321
			Accounting	.025	.105	.812	-.182	.233
			Marketing	.015	.110	.890	-.202	.232
			Common Foundation	.256*	.092	.006	.074	.438
		Common Foundation	Finance	-.121	.063	.056	-.247	.003
			Accounting	-.231*	.079	.004	-.387	-.076
			Marketing	-.241*	.085	.005	-.409	-.073
			HRM	-.256*	.092	.006	-.438	-.074
Student's Academic Performance	LSD	Finance	Accounting	.064	.090	.475	-.113	.243
			Marketing	.019	.097	.842	-.172	.211
			HRM	.158	.105	.134	-.048	.365
			Common Foundation	.032	.070	.649	-.106	.171
		Accounting	Finance	-.064	.090	.475	-.243	.113
			Marketing	-.045	.110	.681	-.263	.171
			HRM	.093	.117	.427	-.137	.324
			Common Foundation	-.032	.087	.709	-.205	.139
		Marketing	Finance	-.019	.097	.842	-.211	.172
			Accounting	.045	.110	.681	-.171	.263
			HRM	.139	.122	.259	-.102	.380
			Common Foundation	.012	.094	.893	-.173	.199

		HRM	Finance	-.158	.105	.134	-.365	.048
			Accounting	-.093	.117	.427	-.324	.137
			Marketing	-.139	.122	.259	-.380	.102
			Common Foundation	-.126	.102	.220	-.328	.076
		Common Foundation	Finance	-.03217	.070	.649	-.171	.106
			Accounting	.03276	.087	.709	-.139	.205
			Marketing	-.01277	.094	.893	-.199	.173
			HRM	.12632	.102	.220	-.076	.328
*. The mean difference is significant at the 0.05 level.								

From table 10, it is interpreted that students of common foundation as major are significantly different with HRM, Marketing, accounting and finance as majors in case of transactional leadership while the rest all pair, no significant difference reported for study variables. Thereby, the proposed alternate hypothesis H_3 is partially accepted.

Comparative mean with year

One-way Anova test is conducted to study the difference in study variables to the year of students.

Table 11. Descriptive statistics

		N	Mean	Std. Deviation	Std. Error
Transformational Leadership	1st year	142	3.5148	.75116	.06304
	2nd year	113	3.6035	.63737	.05996
	3rd year	145	3.4924	.73182	.06077
	Total	400	3.5318	.71333	.03567
Transactional Leadership	1st year	142	3.0563	.46164	.03874
	2nd year	113	3.1327	.50893	.04788
	3rd year	145	3.3317	.53342	.04430
	Total	400	3.1778	.51492	.02575
Student's Academic Performance	1st year	142	3.5000	.57661	.04839
	2nd year	113	3.4664	.56293	.05296
	3rd year	145	3.5097	.55118	.04577
	Total	400	3.4940	.56250	.02812

In table 11, a slight difference is reported in the mean towards the study variable for students of different years.

Table 12. ANOVA result with age group

		Sum of Squares	df	Mean Square	F	Sig.
Transformational Leadership	Between Groups	.848	2	.424	.832	.436
	Within Groups	202.179	397	.509		
	Total	203.027	399			
Transactional Leadership	Between Groups	5.760	2	2.880	11.429	.000
	Within Groups	100.032	397	.252		
	Total	105.792	399			
Student's Academic Performance	Between Groups	.127	2	.063	.200	.819
	Within Groups	126.119	397	.318		
	Total	126.246	399			

In the case of transactional leadership only, the value of p is less than .05. Therefore, there is the possibility of significant differences among different years of students (table 12).

Table 13. Multiple Comparison table

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Transformational Leadership	LSD	1st year	2nd year	-.08875	.08996	.324	-.2656	.0881
			3rd year	.02237	.08425	.791	-.1433	.1880
		2nd year	1st year	.08875	.08996	.324	-.0881	.2656
			3rd year	.11113	.08955	.215	-.0649	.2872
		3rd year	1st year	-.02237	.08425	.791	-.1880	.1433
			2nd year	-.11113	.08955	.215	-.2872	.0649
Transactional Leadership	LSD	1st year	2nd year	-.07641	.06328	.228	-.2008	.0480
			3rd year	-.27539*	.05926	.000	-.3919	-.1589
		2nd year	1st year	.07641	.06328	.228	-.0480	.2008
			3rd year	-.19898*	.06299	.002	-.3228	-.0751
		3rd year	1st year	.27539*	.05926	.000	.1589	.3919
			2nd year	.19898*	.06299	.002	.0751	.3228
Student's Academic Performance	LSD	1st year	2nd year	.03363	.07105	.636	-.1061	.1733
			3rd year	-.00966	.06654	.885	-.1405	.1212
		2nd year	1st year	-.03363	.07105	.636	-.1733	.1061
			3rd year	-.04328	.07073	.541	-.1823	.0958
		3rd year	1st year	.00966	.06654	.885	-.1212	.1405
			2nd year	.04328	.07073	.541	-.0958	.1823
*. The mean difference is significant at the 0.05 level.								

From table 13, it is interpreted that 3rd-year students are significantly different from 1st year and 2nd-year students in the case of transactional leadership while the rest

all pair, no significant difference reported for study variables. Thereby, the proposed alternate hypothesis H_4 is partially accepted.

4.4 Correlation Analysis

It is conducted to test the relationship among study variables as preliminary support for further investigation.

Table 14. Correlation result

Variable		Students' Academic Performance	Transactional Leadership
Students' Academic	Pearson Correlation	1	.277**
Performance			0
	Sig. (2-tailed)		
		400	400
	N		
Transactional Leadership		.277**	1
	Pearson Correlation		
		0	
	Sig. (2-tailed)		
		400	400
	N		
**. Correlation is significant at the 0.01 level (2-tailed).			

From table 14, it is interpreted that there are significant and positive associations among the study variable.

4.5 Regression Analysis

4.5.1 Impact of Teacher's Transformational leadership on academic performance of student

Regression analysis is conducted to find the impact of transformational leadership on academic performance.

Table 15. Model summary of transformational leadership

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.539[a]	.290	.288	.47454
a. Predictors: (Constant), Transformational Leadership				

The value of 'Adjusted R Square' is .288, which means the independent variable explains 28.8 % of the independent variable's variability in the dependent variable. The remaining 71.2% is attributed to other external factors.

Table 16. ANOVA results of transformational leadership

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	36.621	1	36.621	162.622	.000[b]
	Residual	89.625	398	.225		
	Total	126.246	399			
a. Dependent Variable: Student's Academic Performance						
b. Predictors: (Constant), Transformational Leadership						

From table 16, it is interpreted that transformational leadership is a significant predictor of academic performance.

Table 17. Coefficient results of transformational leadership

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.994	.120		16.618	.000
	Transformational Leadership	.425	.033	.539	12.752	.000
a. Dependent Variable: Student's Academic Performance						

From table 17, it is confirmed that there is a significant positive impact of transformational leadership on academic performance. Thereby, the proposed alternate hypothesis H_5 is accepted.

4.5.2 Impact of Teacher's Transactional leadership on academic performance of student

Regression analysis is conducted to find the impact of transformational leadership on academic performance.

Table 18. Model summary of Transactional leadership

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.277[a]	.077	.075	.54109
a. Predictors: (Constant), Transactional Leadership				

The value of 'Adjusted R Square' is .075, which means the independent variable explains 7.5 % of the variability in the dependent variable and the remaining 92.5 % is attributed to other external factors.

Table 19. ANOVA results of Transactional leadership

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.720	1	9.720	33.198	.000[b]
	Residual	116.526	398	.293		
	Total	126.246	399			
a. Dependent Variable: Student's Academic Performance						
b. Predictors: (Constant), Transactional Leadership						

From table 19, it is interpreted that transactional leadership is a significant predictor of academic performance.

Table 20. Coefficient results of Transactional leadership

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.531	.169		14.944	.000
	Transactional Leadership	.303	.053	.277	5.762	.000
a. Dependent Variable: Student's Academic Performance						

From table 20, it is confirmed that there is a significant positive impact of transformational leadership on academic performance. Thereby, the proposed alternate hypothesis H_6 is accepted.

Impact of Teacher's Leadership on academic performance of student

Teacher leadership is considered as composed of both types – transactional and transformational. In this test, both types of leadership are taken as an independent.

Table 21. Model summary of teacher's leadership

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.572[a]	.327	.323	.46270
a. Predictors: (Constant), Transformational Leadership, Transactional Leadership				

The value of 'Adjusted R Square' is .323, which means the independent variable explains 32.3 % of the variability in the dependent variable and the remaining 67.7 % is attributed to other external factors.

Table 22. ANOVA results of teacher's leadership

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.250	2	20.625	96.337	.000[b]
	Residual	84.995	397	.214		
	Total	126.246	399			
a. Dependent Variable: Student's Academic Performance						
b. Predictors: (Constant), Transformational Leadership, Transactional Leadership						

From table 22, it is interpreted that transactional leadership is a significant predictor of academic performance.

Table 23. Coefficient results of teacher's leadership

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.409	.172		8.201	.000
	Transactional Leadership	.212	.046	.194	4.650	.000
	Transformational Leadership	.400	.033	.507	12.136	.000
a. Dependent Variable: Student's Academic Performance						

From table 23, it is confirmed that there is a significant positive impact of transformational leadership on academic performance. Thereby, the proposed alternate hypothesis H_7 is accepted. The results also demonstrate that transformational leadership has a better impact on student's academic performance than transactional leadership. Still, overall, teachers' leadership is important for better students' academic performance.

Conclusion and Recommendations

Based on the finding, it is revealed that there is a significant impact of teachers' leadership on students' academic performance. The teacher's leadership is measured in two forms – transactional and transformational. In this study, Transformational leadership of teacher refers to – motivating students for self-development, helping the student to understand their vision, ensuring that students for teamwork, encouraging critical and strategic thinking, maintaining two-way communication with students, providing challenges, consistently giving positive feedback for improvement, provide an empathic shoulder, fair rules for the class and highly impartial while transactional leadership of a teacher is measured in terms – wants students to follow the command,

emphasize on student's performance, always intervenes for meeting expectations, encourage not change in pre-planned activities, encourage to work traditionally, enable to performance in accepted patterns only, quick to notice when students achieve a predetermined goal and rewards appropriately, tend to think inside the box for solving problems, and follows strict and rigid about the organizational rules. Student's Academic performance is evaluated in terms of – the ability to remember the concepts discussed in the class, ability to go for self-study, listen attentively, actively participate in discussions, ability to understand and answer questions, ability to apply concepts learned in the class, able work hard for performance improvement, independently able to do any academic work/activities, comfortably helping others in academic work, motivated to score well and apply knowledge outside the class. It is concluded that leadership is an essential behavioural factor of successful teachers that leads to students' better performance. It is also reported that both types of leadership have a significant and positive influence on students. At the same time, better influence is reported for teachers' transformational leadership on academic performance than transactional leadership.

In the case of transactional leadership, a significant perceptual difference is reported among students of different gender, age groups, majors, and years while academic performance is also perceived differently regarding gender.

Recommendation

Based on the finding, it is recommended that teachers use leadership qualities with students and influence their performance and behaviour for a bright future. As transformational leadership has a better impact, it is recommended to teachers to adopt possible attributes of transformational leadership like - motivating students for self-development, helping the student to understand their vision, ensuring that student for teamwork, encouraging critical and strategic thinking, maintaining two-way communication with students, provides challenges, consistently giving positive feedbacks for improvement, provide an empathic shoulder, fair rules for the class and highly impartial.

Limitation and future scope

This study is limited to only one college of the Royal University of Bhutan, although ten colleges are under it with two variables only. It has scope to conduct such studies with more relevant variables of teachers' behaviour in all colleges.

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