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The Impact of Teacher Feedback and Motivation on Students' Academic Performance in Higher Secondary Education: A Study in District Nushki Balochistan

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Abstract

The impact of teacher motivation and feedback on higher secondary level college levels students in District Nushki, Baluchistan's academic performance were investigated in this study. The main objectives of this study was to investigate the relationship between teacher motivation and student academic performance in higher secondary education settings and to understand the perception of students about teacher's feedback and motivation and influence on their motivation to improve academic learning. And had many significance as it addresses the vital role of teacher feedback and motivation aspects in improving students' academic performance in higher secondary education in District Nushki. Data were collected via a self-constructed questionnaire given to a random sample of 83 teachers and 241 students. Data analysis was done using the IBM Statistical Package for the Social Sciences (SPSS) version 27. Descriptive statistics were used to characterize the demographic profile and variables; Regression analysis were employed to investigate correlations among the variables. The results demonstrated a good and statistically significant correlation between student performance, teacher motivation, and teacher feedback. Although the degree of correlation was little, results indicate that students are more probable to do better academically when their teachers are motivated and provide them feedback and helping them in their learning process. These results support earlier studies and point out how crucial teacher-centered techniques are for raising academic results.

Keywords: Teacher Motivation, Teacher Feedback, Student Academic Performance, Higher Secondary Education.

Introduction

Education is the cornerstone of any country's social and economic development. It allows individuals to acquire a range of knowledge, skills, and attitudes that contribute to personal development and social advancement (UNESCO, 2021). Education, and particularly high-quality education, enables students to develop the ability to adapt to constantly changing technology, global economies, and culturally diverse environments (OECD, 2020). The aim of good education is more than just achieving education standards; it is the ability to think critically, display creativity, and be a responsible citizen. Education promotes tolerance, social cohesion and sustainable development (World Bank, 2019). Teachers are an essential part of education because they are our facilitators of learning, our mentors, and our role models. Teachers are at the heart of the learning medium and highly responsible for creating a classroom climate that motivates and provides feedback so that learning is enhanced. When teachers are motivated, they tend to apply different instructional strategies and meaningful forms of feedback that keep the students interested in learning. (Hornstra et al., 2015).

In the realm of education, the role of teacher feedback is important as it significantly influences student success. Research shows that students who get consistent and prompt feedback and motivation from their teachers tend to excel academically (Madigan & Kim, 2021). Teachers are an essential part in impacting the learning environment and are mainly responsible for motivating students to learn. The methods used by teachers to encourage students to learn may vary as can the strategies they utilize from individual to individual. (Hornstra, et al., 2015)

According to Hornstra et al. (2015), the motivation of teachers and teaching beliefs have an influence over the feedback methods teachers give to their students along with the motivational environment they create in the classrooms. Those teachers that have intrinsic motivation will be abler to create a supportive environment that fosters academic risk-taking and persistence. Feedback is something that an unmotivated teacher would delay or give it minimally, thus negatively impacting student learning and reducing their potential. The researches indicates that motivated teachers challenge students with novel methods of instructional delivery and classroom interaction, and provide feedback with which students can reflect and improve upon their understanding (Klassen et al., 2013; Hattie & Timperley, 2007).

Motivated teacher's express enthusiasm for their subject matter and implement teaching strategies and feedback techniques that motivate students to achieve academically (Skaldic & Skaalvik, 2014). Feedback becomes a medium for online operations of teaching and learning, whereby students can identify where they might have gone wrong, clear up misunderstandings, and reinforce what they already know (Hattie & Timperley, 2007). Research has found that when students are given constant

and constructive feedback, they tend to establish better learning targets, control their efforts, and realize higher levels of achievement (Shute, 2008).

Nushki, a district in Pakistan's southwestern region, is known for its distinct cultural and geological landscape. In the field of education, the region confronts significant challenges such as insufficient funding, poor facilities, and a lack of trained teachers, despite its rich past and promising future. These difficulties are reflected in the higher secondary education system in Nushki, which frequently struggles with problems like high dropout rates, low enrollment rates, and limited access to high-quality learning resources. Although the hard work of many, and potential of students, both schools and colleges in Nushki face barriers such as resource constraints, limited teacher development, and a lack of good educational spaces (Government of Balochistan, 2020).

Higher secondary education, which normally consists of grades 11 and 12, is an important phase in a student's academic career. It prepares students for university-level coursework or vocational training, acting as a link between secondary education and higher education. The quality of education provided during this stage has an important effect on students' personal and professional growth. However, according to Nushki, structural problems frequently compromise the efficiency of this educational stage, requiring for an in-depth examination at the factors influencing student achievement, especially teacher feedback.

In the context of higher secondary education academic performance and the entire student experience are significantly influenced by student motivation. Students that are motivated are more likely to interact with their academic performance like as curriculum, overcome obstacles, and succeed academically. As a result, both academics and teachers are focusing on comprehending and improving the elements that affect students' motivation. Among these, the encouragement and feedback provided by teachers are crucial in determining how motivated and successful students are in the classroom. When teachers actively engage in providing feedback, it becomes easier for students to understand the objectives of their coursework. Timely feedback is essential for adjusting learning strategies and helping students correct their errors efficiently. It's evident that both constructive criticism and praise affect a student's academic performance uniquely.

Statement of the Problem

Feedback and motivation is important in all educational contexts for various reasons such as evaluating students' progress, enhancing their skills and knowledge, and increasing students' motivation and confidence in educational environments (Hyland & Hyland, 2006).

Higher secondary education in District Nushki faced some serious issues in connection with low student academic engagement and performance. There were

several attempts to address this situation and promote good education quality; however, many students struggled to achieve satisfactory performance. One of the principal issues was the considerable lack of teacher motivation and good feedback approaches. Teacher motivation might have been at a low point because of a lack of professional development opportunities, no public recognition and support of educational authorities.

In addition, feedback was either non-existent or too general to support improvement. The combined effect of these deficiencies undermined the students' opportunity to understand their academic strengths and weaknesses which led to decreased motivation and learning and/or achievement outcomes. Previous literature concluded that teacher motivation and feedback of the student contributed to academic achievement; however, in Nushki, the relationship had not yet been examined; therefore, identifying the relationship between teacher motivation and feedback and student academic performance in higher secondary education was important empirical research to undertake. This study was finding the impact of teacher's motivation and feedback on students' academic performance, concentrating on whether the nature and transfer of feedback can positively influence students' learning performances and outcomes.

Limitations of Study

The limitations of a Study in District Nushki, Balochistan, had positive limitations in educational setting. First, it provided geographically limited to District Nushki, which may boundary the generalizability of the findings to other regions or educational backgrounds. The sample size of study was limited by the availability of participants within the district, additionally; the specific socio-cultural environment of Balochistan is likely to influence teacher-student interactions and perceptions of feedback, theoretically making the results less applicable to other settings. Furthermore, self-reported data from students and teachers, collected through closed ended questionnaires may introduce personal biases or inexactitudes. Teacher erraticism in terms of experience, communication style, and individual motivation levels will likely affect the consistency of feedback across the sample. Furthermore, the study did not account for external factors such as home environment, peer influence, or access to learning resources, which could also influence students' academic performance. Lastly, the study will mainly focus on teacher feedback as a motivational tool and impact on students' academic performance in higher secondary education.

Literature Review

Teachers have the ability to offer assurance and motivation, aid in their students' success, and boost their academic performance through gathering, examining, and acting on feedback from students. Generating feedback is a cost-effective and powerful method to improve academic achievements. Instead of giving help without a plan, teachers should take the time to understand their students and their individual needs,

and give them their full attention. This strategy helps teachers to support student learning and encourage the formation of connections (Fletcher-Wood, 2018)

Motivation plays a very important for the students teaching and learning at higher education level (Darazi, Khoso & Mahesar, 2022). The research conducted by Hamza Al Maharma and Rami Abusa'aleek (2022) analyzed the effects of teacher feedback on student achievement within Jordanian public schools. The researchers analyzed how the quality and delivery methods of classroom feedback affected student learning results. The research sample consisted of 50 male 10th-grade students and the researchers collected their classroom observation data together with their test results. The investigation found that students who received detailed feedback with constructive elements achieved better academic results. Students obtained better academic outcomes and experienced less discouragement during tests when instructors provided task-focused feedback. Students received motivation through feedback that explained incorrect answers while providing improvement methods rather than receiving judgmental comments.

Rehman, Bibi, & Khalid (2020) study the influence of teacher motivation and feedback on student academic performance in rural Balochistan. They gathered information through surveys and observations in 300 government secondary school teachers and 450 students. The research observed that motivated educators that offer immediate and effective feedback have a positive impact on their students' learning outcomes, self-confidence, and academic motivation. However, it was found in the study that teachers were demotivated by low salary and lack of professional development opportunities and negative working environment which in turn led to low feedback quality and student's performance. The authors concluded that educational authorities should develop teacher training programs aimed at strengthening feedback and motivation in teaching, particularly in less developed areas.

The educational process depends heavily on motivation because higher education includes complex academic requirements which need additional student engagement. Students need motivation because it functions as a fundamental force to push them toward curricular involvement and overcome obstacles to achieve educational success. Darazi, Khoso, and Mahesar (2022) demonstrated that student motivation serves as the essential factor which determines both the teaching process effectiveness and the learning result quality. Students who possess motivation show sustained attention along with perseverance in difficult tasks and achieve better academic results than unmotivated students.

Assessing how teacher motivation affects pupils' academic achievement, Jan and Khan (2019) investigated government secondary schools in Quetta, Balochistan. Their research showed that enhancing student conduct and classroom achievement relied heavily on intrinsic motivation—that is, personal commitment and professional ethics.

External influences including delayed salaries, insufficient recognition, and political interference in school governance demotivated instructors, hence impacting student performance and classroom engagement. The research suggested that the government should guarantee timely salaries, offer incentives, and lessen administrative pressure in Baluchistan's schools to improve teacher morale and performance.

Shoukat and Baloch (2020) conducted an investigation into the feedback practices among secondary school teachers working in the divisions of Sibi and Kalat of Balochistan. The study concluded that consistent and constructive feedback from the teacher does contribute to the enhancement of understanding on the part of the student, particularly in science and language subjects. Though, the study also found a large number of teachers did not possess tolerable knowledge for imparting feedback to students. Therefore, the study suggested the need for professional development programs designed to train teachers in assessment and feedback strategies so as to improve student learning outcomes in rural Balochistan schools.

Ahmed and Saeed (2018) examined factors affecting student achievement in public schools across provinces of Pakistan, including Balochistan. In their comparative analysis, they concluded that students in Balochistan showed lower performance in comparison with their counterparts in Punjab and Sindh from the fact of a grouping of under-motivated teachers, overcrowded classrooms, and lack of adequate academic assistance. The study, therefore, suggested that some special interventions be taken for teacher motivation, infrastructure, and student support services to fill the gap in academic performance between the provinces

In their 2021 study, Noor and Jamil found that female teachers in Balochistan discriminated job satisfaction and workplace safety, which constituted two factors which in turn were associated with motivation and student achievement of teachers. A great number of female teachers faced problems commuting and cultural limitations. Hence there arose absenteeism and morale became low. The study suggested that if we can build a secure and supportive work environment for female teachers, retention of female teachers may improve and this may correlate with student academic achievement, especially in girls' schools.

Research Methodology

The study used a quantitative descriptive study design to investigate the impact of teacher feedback and motivation on students' academic performance in higher secondary education at district Nushki. The study consisted of 324 participants, including 83 teachers and 241 students were selected through simple random samples from both public and private colleges. To ensure representation and reduce prejudice, emphasize the importance of using random samples in research-based studies (Cohen, Manian and Morrison, 2017). The study used a structured, closed questionnaire as primarily data collection tools, ensuring simple uniformity and analysis and supported

the use of the structured questionnaire and emphasized their role in securing similar data collections in different educational references (Frankel, Walon and Hune, 2012). Questionnaires were designed based on valid equipment used in advance studies, such as Joseph and Saeed (2018) and Shakir and Beg (2015), who discovered a similar variable in the context of Pakistan. The data was collected directly from the respondents and analyzed using SPSS version 26, which is recognized for its credibility in handling educational data (Field, 2013). Descriptive statistics (frequency, percent) and Pearson correlation were used to investigate the ratio of subordinate tool variables. The general reliability of the device was confirmed with an alpha of 0.848 by Chronback, which reflects strong internal stability (Tawakol and Denic, 2011).

Research Findings

The findings from this study were based on data gathered from 83 teachers and 241 students from public and private colleges in District Nushki. Descriptive figures were implemented using SPSS to analyze the reactions related to teacher motivation, Feedback and students' academic performance. The results emphasized patterns and trends, which helped to assess the relationship between the study variables, according to similar methods used in per -educational research (Cohen et al., 2017; Creswell, 2014).

Table Demographic Characteristics of Teacher Respondents (N = 83)

Variable	Category	Frequency	Percent (%)
Gender	Male	39	47.0%
	Female	44	53.0%
Qualification	Graduation	10	12.0%
	Master's Degree	37	44.6%
	M.Phil.	29	34.9%
	PhD	7	8.4%
Years of Experience	0–1 years	7	8.4%
	2–5 years	17	20.5%
	6–10 years	32	38.6%
	11–15 years	15	18.1%
	16+ years	12	14.5%
Type of Institution	Government College	43	51.8%
	Private College	40	48.2%

Demographic data from 83 teacher's respondents revealed a balanced gender distribution, with 47% of male and 53% of female participants to ensure different approaches. In terms of qualification, the majority had a Master's degree (44.6%), followed by M.Phil. -Holders (34.9%), indicated a well -qualified teaching work. Most respondents had 6 to 10 years of teaching experience (38.6%), reflecting the risk of adequate orbit. In addition, the representation was almost equal to both the government (51.8%) and private (48.2%) colleges, giving a comprehensive approach to institutional context. Teacher increases the prosperity and generality of such diversity conclusions in demographics (Creswell, 2014; Cohen, Manian and Morrison, 2018). It supports the purpose of the study to investigate motivation and response in a diverse teacher population, in accordance with similar demographic -based studies in educational research (Komba and Nekumbi, 2008).

Table : Demographic Characteristics of Student Respondents (N = 241)

Variable	Category	Frequency	Percent (%)
Gender	Male	109	45.2%
	Female	132	54.8%
Age	16–17 years	115	47.7%
	17–18 years	90	37.3%
	18–19 years	29	12.0%
	Above 19 years	7	2.9%
Class Level	11th Grade (1st Year)	107	44.4%
	12th Grade (2nd Year)	134	55.6%
Type of Institution	Government College	142	58.9%
	Private College	99	41.1%

The student's sample included 241 respondents from both the government (58.9%) and private (41.1%) college, with a smaller plural woman (54.8%). Most participants were between 16-18 years, and the academic level was almost balanced between 11 and 12 classes. This demographic variety ensured a good -round representation of the higher secondary student population in District Nushki, which supports the reliability of the conclusions (Creswell, 2014).

Table :Descriptive Statistics of Key Variables

Descriptive statistics were used to summarize and describe the central

<i>Variable</i>	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Teacher Motivation (TM / VM)	83	12.00	28.00	20.3614	4.17477
Teacher Feedback (TF / VF)	83	16.00	28.00	23.2048	3.09113
Student Academic Performance (SA)	241	35.00	68.00	54.5394	7.39140

tendency (mean, median) as well as dispersion of key variables. Teacher Motivation scoring average (VM) was 20.36 (SD = 4.17) which showed that teachers have a moderate level of motivation. This confirms the earlier results of Dinham and Scott (2000) observing that there is confusion between intrinsic as well as extrinsic factors in shaping teacher motivation. Teacher Feedback (VF)=23.20 (SD=3.09) (VF_0 = 51) The mean score demonstrated a moderately positive perception of feedback practices This is consistent with Hattie and Timperley (2007) contention that high quality teaching and student achievement are enhanced by effective feedback. For Student Academic Performance (SA) the mean score was 54.53 with a standard deviation that was now higher (7.39), implying a wider range of performance levels between students. This finding is in alignment with earlier work by McCoach & Siegle (2003) which demonstrates that student achievement is a combination of school-related as well as psychological variables.

Descriptive statistics indicated that within the sample, teacher motivation tended to be towards higher-values (mean = 4.06–4.14 out of 5) and fairly absolute (SD = <0.76). All these results consolidate the base for building correlation and regression analysis to investigate inter-variables relationships.

The Impact of Teacher Feedback on Student Academic Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.963 ^a	.927	.926	1.65899

a. Predictors: (Constant), Teacher's Feedback

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2833.356	1	2833.356	1029.465	.000 ^b
	Residual	222.933	81	2.752		
	Total	3056.289	82			

a. Dependent Variable: Student's Academic performance

b. Predictors: (Constant), Teacher's Feedback

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.100	1.454		-1.444	.152
	TF	1.158	.036	.963	32.085	.000

a. Dependent Variable: Student's Academic Performance

The regression analysis was done to investigate how the independent variable (Teacher's Feedback) affects the dependent variable (Student's Academic performance). Model Summary revealed that the correlation coefficient (R) was equal 0.963, which is very strong positive relationship between the predictor and the outcome variable. The R square value of 0.927 indicated that the variation in the academic performance of students (SA) by the teacher (TF) was about 92.7 percent. The Adjusted R Square (0.926) also indicated the strength of the model with minimum shrinkage indicating that the model was an excellent one. The regression model was also significant as indicated by the results of ANOVA where the F-value of 1029.465 and the p-value was lower than 0.001. This showed that overall regression model was significant and the independent variable was significant in predicting the dependent variable.

The Coefficients table revealed that the predictor (TF) had a positive unstandardized coefficient ($B = 1.158$, $p = \text{less than } 0.001$) indicating that an increase of one unit of vI resulted in 1.158 increment of SA. The high predictive power of the variable was also affirmed by the standardized beta coefficient ($= 0.963$). The constant ($B = -2.100$, $p = 0.152$) was not statistically significant which meant that the regression line did not significantly go through the intercept when vI was at zero.

These results supported the hypothesis that the independent variable (teacher-related factor) affected the academic performance of students significantly and positively. These findings were consistent with the results of Rehman, Bibi, and Khalid (2020), who additionally indicated that motivated teachers and positive feedback application also had a positive effect on the academic performance of students in rural Balochistan. In the same manner, Klassen, Perry and Frenzel (2012) emphasized that teacher motivation and feedback in time improved the learning performance and engagement of students. In addition, Pakistani school research by Ahmed and Saeed (2018) established that teacher performance and support systems played a key role in the explanations of differences in the academic success of students. In general, the regression analysis of this study presented high statistical data that the motivation of teachers and teacher feedback had significant impacts on student academic performance in higher secondary schools of District Nushki, Balochistan.

Future Recommendations

- Higher secondary education and colleges in District Nushki were the center of this research. Future research should include universities from many areas in both the private and public sectors so as to provide a more comprehensive comparison of how institutional type and regional characteristics affect the link between teacher motivation, feedback, and student academic performance.
- Employing a cross-sectional design, the present study gathered information from 83 instructors and 241 pupils. Future studies should use a larger and more varied sample, ideally across several communities or provinces, to enhance generalizability.
- This research only included numerical techniques like as organized questionnaires. Future studies should take a mixed-methods approach, combining interviews or classroom observations to better grasp teaching and learning mechanisms.
- This research centered on teacher motivation and feedback as predictors. Future studies should investigate other factors including school leadership, parent involvement, socioeconomic level, and student engagement, which might moderate or mediate academic success.

- The study was cross-sectional and only covered one point in time. Future studies should be longitudinal in nature, following variations in student results over a longer period to investigate the ongoing impact of teacher motivation and input.

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