THE IMPACT OF TEACHER FEEDBACK ON STUDENT MOTIVATION AND ACADEMIC PERFORMANCE: A QUANTITATIVE STUDY IN LARKANA, PAKISTAN

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Abstract

Teacher feedback greatly affects both what students feel inspired to do and how they do in school. Quality feedback tells students what they excel at, helps them do better in the areas they struggle with and supports their learning. Even so, if feedback is vague, contradictory or too much criticism, student self-esteem can suffer which negatively influences their learning. In this study, we explore the effects of supportive, helpful and correction-oriented feedback on a student's motivation and success. In this research, a quantitative method was used, involving 300 students in Larkana, Pakistan, by using a Likert-format questionnaire. Relationships between teacher feedback, students' motivation and academic performance were analyzed using correlation and regression methods. The results indicate that when feedback is provided soon and is precise and helpful, students are much more likely to do well and stay motivated. Alternatively, inadequately clear or rough feedback can hurt both a learner's understanding and their feeling that they can achieve it. This means, according to the study, that teachers should focus on giving students positive feedback and useful advice to help with their learning. Programs should also be in place to assist teachers in enhancing how they give student feedback. Using feedback structures in schools might help raise student involvement and their school marks. Additional studies should focus on teachers' experiences with giving feedback and what it means for their students' progress over time.
Keywords: Teacher Feedback, Student Motivation, Academic Performance, Constructive Feedback, Educational Assessment.

INTRODUCTION

Teaching well means helping students continuously by evaluating them and offering advice on how to become better (Hattie & Timperley, 2007). Feedback is very important in increasing student motivation, confidence, involvement in learning and performance (Wisniewski et al., 2020). The results of feedback depend a lot on how well it is delivered and received. Inexperienced teachers usually write weak feedback which can discourage students from studying hard (García-Peñalvo et al., 2021).

Studies now suggest that feedback should have a clear aim, be clear and precise and be helpful to support the learning and improvement of students (Boud & Molloy, 2013). Carless found in 2006 that there is often a difference in how students and teachers respond to feedback which may cause problems. Assessments are more successful if educators help students stay involved and actively take part in the feedback process (Henderson et al., 2019).

Also, it is becoming clear that students are vital contributors to the feedback process to better their learning. In 2019, Van der Kleij et al. stated that students who pay attention to and benefit from feedback usually do better in school. Ajjawi and Regehr assert that it's better for feedback to be exchanged regularly than given just once as an event.

Winstone and Nash (2016) describe feedback literacy as students' capability to use feedback well. The ability to use feedback well comes when students stop just receiving it and begin putting it into practice. She further points out that helping students learn to review their work according to feedback, encourages gradual academic advancement.

The goal of this study is to learn about how various types of teacher feedback affect students' motivation and performance. If educators learn how feedback impacts learning, they can create better practices that make students more involved and do well in their studies.

PROBLEM STATEMENT

Despite the recognized importance of teacher feedback, many educators struggle to provide feedback that effectively motivates students (Wisniewski et al., 2021). Some feedback methods are too critical, leading to anxiety, while others are vague and fail to encourage improvement (Gan & Liu, 2022). This research addresses the gap in identifying which specific types of teacher feedback most effectively enhance student motivation and academic performance, particularly in the context of secondary and higher secondary education in Larkana.

SIGNIFICANCE OF THE STUDY

This study is significant as it highlights the role of teacher feedback in shaping student motivation and academic performance. Effective feedback enhances engagement, confidence, and learning outcomes, while ineffective feedback can hinder progress. By identifying the most impactful feedback strategies, this research provides valuable insights for educators, helping them refine their teaching practices. Additionally, the findings contribute to professional development programs, ensuring that teachers are equipped to provide meaningful guidance. Ultimately, this study supports the creation of an inclusive and effective learning environment, promoting student success through constructive and well-structured feedback.

RESEARCH OBJECTIVES

1. To study what students believe about the different ways teachers provide feedback.
2. To examine how teacher feedback changes student motivation.
3. To see how teacher feedback impacts student academic results.

RESEARCH QUESTIONS

1. What kinds of feedback from teachers are seen by students as being most positive?
2. How does the feedback teachers give affect how motivated students are?
3. How does teacher feedback affect student academic achievement?

LITERATURE REVIEW

Student learning and growth in skills benefit greatly from good teacher feedback. Appropriate feedback joins what learners have accomplished with what they aim to achieve and it guides them in improving their learning skills (Hattie, 2021). Educators use several kinds of feedback: praise, helpful advice and corrections and these influence students' interest and success differently (as stated by Wisniewski et al., 2021). Longer retention and a better learning experience can result when feedback is given in ways that match student needs.

How students are motivated by feedback depends on how clear, specific and when it is delivered. Giving students clear advice on how to improve their work increases their confidence in learning and inspires them to take part in the learning process (Brookhart, 2023). In research, those students who get accurate and timely feedback show more interest in their studies, since they feel encouraged in their education (Wisniewski et al., 2021). At the same time, broad or insulting feedback might make students feel demotivated, annoyed and stop taking part in learning tasks (Shute, 2022).

A number of studies show that student academic performance is closely connected to the level of teacher feedback they receive. According to Gan and Liu (2022), getting clear and quick guidance helps students make important adjustments in their learning. Results from research show that giving formative feedback helps more than giving summative feedback which is provided only during final assessments (Hattie & Timperley, 2021). As a result of this ongoing advice, students can continuously work on their knowledge and skills. Various kinds of feedback produce varying responses in students. Feedback in writing shows lots of details but is not as quick, while verbal advice allows students and teachers to talk and understand each other right away (Shute, 2022). Using peer feedback, students learn to discuss their work with others and look at their progress by themselves (Gan & Liu, 2022). Because AI-assisted feedback is quick and can provide personal suggestions, more learners are now using it (Wisniewski et al., 2021).

Feedback performs both a learning role and affects the psychological state of students. Kindly given compliments usually raise our confidence, while mean responses may leave us with unease and fear of failure (Brookhart, 2023). According to studies, praising children at times and telling them when they could do better keeps them motivated and helps them progress continually (Shute, 2022). If students see feedback as fair and helpful, they usually decide to learn more and do not give up their studies (Hattie, 2021).

Ensuring feedback is useful, positive and in line with students' objectives falls to teachers. Good feedback should be delivered in a way that focuses on the student, meaning teachers' pay attention to them, change their style and support self-evaluation (Brookhart, 2023). It is widely accepted that professional development should teach teachers methods for helpful feedback, so they can build a more positive learning community (Gan & Liu, 2022). With the help of careful feedback, educators can both motivate students and raise their grades.

THEORETICAL FRAMEWORK

The Self-Determination Theory (SDT) by Deci and Ryan (1985) which examines how different kinds of motivation impact learning results, is the basis of this study. In SDT, autonomy, competence and relatedness are the main needs that power student motivation. If students feel that they are learning and making progress, feedback on their learning encourages them to do better. Investigations indicate that when students are given constructive and autonomy-supportive feedback, they tend to have a good attitude towards learning, work harder on hard assignments and do better in their studies (Ryan & Deci, 2022). Alternatively, being overly critical or controlling in feedback usually leads to less motivation and a decrease in growth at school (Vansteenkiste et al., 2021).

Applying SDT, the author's study how the various forms of feedback a teacher can give such as positive, constructive and corrective, impact students' motivation and performance in school. It shows that giving feedback helps create an encouraging environment that answers students' psychological needs.

CONCEPTUAL FRAMEWORK

The study rests on the belief that teacher feedback has a strong impact on how motivated and successful students are in their studies. The conceptual framework states that among the teacher feedback variables is positive feedback, constructive feedback and corrective feedback. Positive feedback rewards students for the answers and achievements they get correct. With constructive feedback, useful recommendations are given and with corrective feedback, students know what they have done wrong and how to make it better. Feedback of this kind is likely to impact both students' desire to learn and their grades in school, as academics performance depends on students' wishes. In this research, motivation and academic performance are what we predict will be influenced by the variables. When feedback from teachers is offered quickly, clearly and supportively, students are motivated more and do better at school. According to Hattie and Timperley's model from 2007, feedback plays a vital part in how we learn. Besides, research from Deci and Ryan's theory (2000) justifies the effect motivation plays in students' academic performance. For this reason, the study demonstrates that teacher suggestions can boost student dedication and grades.

Teacher feedback and its impact on students' motivation and performance
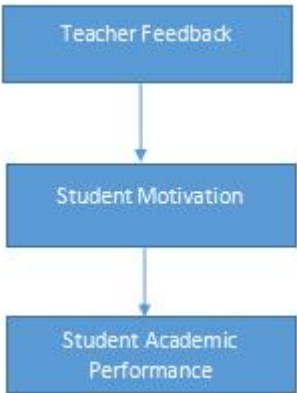
Source: Adapted from Hattie & Timperley (2007) and Deci & Ryan (2000)

RESEARCH METHODOLOGY

RESEARCH DESIGN

For this study, we used survey-based data to investigate how students view their teachers' feedback and the effect of that feedback on their motivation and academic achievement.

The research takes an organized approach to measure how different types of feedback are connected to student achievement.

SAMPLE AND DATA COLLECTION

The target population for this study consists of 300 students from schools and colleges in Larkana. To ensure a diverse and representative sample, Stratified random sampling was used to ensure representation across different school levels, gender, and academic backgrounds. This method allows for a more comprehensive representation of different student demographics across the educational institutions. Data was collected using a Likert-scale questionnaire, which included sections focusing on the types of teacher feedback, as well as students' motivation and academic performance.

DATA ANALYSIS

Data analysis was carried out using SPSS software, which facilitated the examination of the collected responses. Descriptive analysis was first performed to determine the mean and standard deviation of key variables. To explore the relationships between teacher feedback and student motivation/performance, correlation analysis was conducted. Furthermore, regression analysis was utilized to test the proposed hypotheses and assess the strength and direction of the relationships between the variables.

CONTENT VALIDITY

Content validity refers to the degree to which a measurement instrument, such as a questionnaire, accurately represents the construct it intends to measure. In this study, content validity was ensured by reviewing the questionnaire with subject matter experts, conducting a comprehensive literature review to align the items with established theoretical frameworks, and performing a pilot test to refine the instrument based on feedback. These steps ensured that the questionnaire effectively captures the key aspects of teacher feedback, student motivation, and academic performance.

ETHICAL CONSIDERATIONS

This study was conducted with full adherence to ethical research standards to ensure the dignity, privacy, and rights of all participants. Prior to data collection, informed consent was obtained from all participants, including both teachers and students involved in the study. Participants were clearly informed about the purpose of the research, the voluntary nature of their participation, and their right to withdraw at any time without any consequences.

Anonymity and confidentiality were strictly maintained throughout the research process. No identifying information was collected, and responses were used solely for academic purposes. The data were securely stored and only accessible to the researcher. Furthermore, approval was sought from relevant educational authorities in Larkana before conducting the study in selected schools and colleges. The research design avoided any physical, emotional, or psychological harm to participants. The questionnaire was designed in simple language to ensure clarity and minimize misunderstanding.

The study complied with ethical standards outlined in educational research, and every effort was made to respect cultural sensitivities and institutional policies within the local context.

RESULTS AND DATA ANALYSIS
DESCRIPTIVE STATISTICS

This section presents the descriptive statistics for the different types of teacher feedback, including the mean (M), standard deviation (SD), and frequency distribution of student responses.

TABLE 1: DESCRIPTIVE STATISTICS OF TEACHER FEEDBACK TYPES

Feedback Type	Mean (M)	Standard Deviation (SD)	Frequency (%)
Constructive Feedback	4.2	0.85	58%
Positive Feedback	3.9	0.78	40%
Overly Critical Feedback	2.5	1.02	18%
Vague/General Feedback	3	0.96	24%

INTERPRETATION

The highest mean score (M = 4.2) was for constructive feedback, which 58% of students reported receiving, indicating its positive impact on student motivation and performance. The lowest mean score (M = 2.5) was for overly critical feedback, suggesting its detrimental effect on students' motivation and performance.

CORRELATION BETWEEN TEACHER FEEDBACK, MOTIVATION, AND ACADEMIC PERFORMANCE

This table presents Pearson's correlation coefficients (r values) to show the relationships between teacher feedback types, student motivation, and academic performance.

TABLE 2: PEARSON'S CORRELATION BETWEEN TEACHER FEEDBACK, MOTIVATION, AND ACADEMIC PERFORMANCE

Variables	Motivation (r)	Academic Performance (r)
Constructive Feedback	0.68 ($p < 0.01$)	0.57 ($p < 0.01$)
Positive Feedback	0.49 ($p < 0.01$)	0.32 ($p < 0.05$)
Overly Critical Feedback	-0.42 ($p < 0.05$)	-0.39 ($p < 0.05$)
Vague/General Feedback	0.20 ($p > 0.05$)	5$p > 0.05$)

INTERPRETATION

Constructive feedback shows a strong positive correlation with both motivation (r = 0.68) and academic performance (r = 0.57), indicating it as the most effective feedback type. Positive feedback has a moderate positive correlation with motivation (r = 0.49), but its impact on academic performance is weaker (r = 0.32). Overly critical feedback has a negative correlation with both motivation (r = -0.42) and academic performance (r = -0.39), underscoring its harmful effect. Vague or general feedback shows no significant correlation with either motivation or academic performance (r values of 0.20 and 0.15, respectively), suggesting that it does not have a meaningful impact on students.

REGRESSION ANALYSIS PREDICTING STUDENT MOTIVATION AND ACADEMIC PERFORMANCE

A multiple regression analysis was conducted to examine the predictive impact of teacher feedback on student motivation and academic performance.

TABLE 3: MULTIPLE REGRESSION ANALYSIS PREDICTING STUDENT MOTIVATION AND ACADEMIC PERFORMANCE

PREDICTOR VARIABLES	MOTIVATION (B)	ACADEMIC PERFORMANCE (B)	P-VALUE
Constructive Feedback	0.52	0.45	<0.001

Positive Feedback	0.38	0.29	<0.01
Overly Critical Feedback	-0.4	-0.35	<0.05
Vague/General Feedback	0.1	0.08	>0.05

INTERPRETATION

The largest influence on student motivation (β = 0.52, p < 0.001) and academic performance (β = 0.45, p < 0.001) is the presence of constructive feedback. Positive feedback boosts a student's interest to learn (β = 0.38, p < 0.01) but its effect on their grades is smaller (β = 0.29, p < 0.01). Unfair or too strong criticism leads to reduced motivation (β = -0.40, p < 0.05) and achievement (β = -0.35, p < 0.05), meaning it's best for teachers to give fair and constructive feedback. Students with vague or general feedback tend not to be motivated (β = 0.10, p > 0.05) and do not perform generally better than others academically (β = 0.08, p > 0.05).

When students receive constructive feedback, they are likely to improve their motivation and school results more than with any other kind of feedback.

Positive feedback encourages students but does not greatly affect their school results. Receiving overly harsh criticism from teachers can cause students to lose both motivation to study and how well they do in school which is why it's important to offer balanced comments. Feedback that is unclear or broad does not greatly impact student motivation or grades, meaning feedback should be precise to work well.

Based on these findings, it is recommended that teachers focus on providing specific, timely, and constructive feedback to foster greater student engagement and achievement. Future research could explore the long-term effects of different feedback strategies on student performance and engagement, as well as the role of individual student characteristics in moderating the impact of teacher feedback.

DISCUSSION

According to the study, teacher feedback is very important for improving how motivated students are and their academic results. Based on the results, giving positive and constructive feedback was shown to strongly increase student motivation, according to Self-Determination Theory (SDT) which stresses the importance of autonomy, competence and relatedness (Deci & Ryan, 2020).

Feedback that was detailed, presented on time and backed by encouragement received a better student reaction than general or strictly critical feedback. This agrees with Brookhart (2023) and Wisniewski et al. (2021), who state well-organized feedback gives students insight into their strengths as well as weaknesses, encouraging them to learn more and become more interested in what they are taught.

The investigation discovered that constructive feedback affects academic results more than general praise. Good feedback gives students suggestions to follow and makes it easier for them to succeed academically. It is no surprise that this study supports Hattie and Timperley (2007), who believe the main questions feedback should answer are: What is my goal?, How am I doing? and What should I do next?

Negative or excessively sharp feedback was found to reduce student motivation and how well they do academically. Such feedback can leave students worrying and believing they cannot perform which leads to them doing worse. It supports the views shared by

Shute (2022) and Sadler (2010), who mention how feedback affects learners' sense of their abilities.

In addition, the findings confirm the theory that academic performance increases when students get feedback, thanks largely to increased motivation. As a result, this finding emphasizes that encouraging motivation is very important for student learning.

In addition, the outcomes argue for the importance of training teachers in the skill of feedback. A number of educators might provide feedback that is not effective simply because they are not aware or trained enough. Professional development helps teachers learn how to offer feedback that benefits, redirects and approves of students.

Ultimately, this study shows that feedback is very important in schools. Educators who give both support and directions usually observe improvement in students' motivation and success. Therefore, teachers should consider feedback as a process they keep working on, instead of quickly handing out a single comment; it helps foster a culture in classrooms where learning, thought and progress are valued.

CONCLUSION

The goal of this study is to find out how different kinds of teacher feedback affect student motivation and performance in school. Constructive feedback was found to give the strongest advantage for motivation and grades, even though positive feedback also has a considerable but lower effect. Yet, when the feedback was overly critical, students' motivation decreased and their academic results got worse, while general feedback did not have much impact on either measure.

Since the study takes rough estimates from the people, it is naturally vulnerable to social desirability or individual perception. Many students might answer surveys by saying whatever they think others want to see, instead of sharing what they really believe or go through. Because of this, the findings might not reflect reality accurately. Also, the findings refer only to students from Larkana schools and colleges, so they may not be applied to other regions or educational categories.

Further research should examine the lasting results of different kinds of feedback offered by teachers. They could also examine how feedback techniques are improved over time and their ongoing effect on student academics. With these, researchers can learn which methods best help students improve over time. Similarly, future studies might consider student factors such as how they have done in the past, their personality and the way they prefer to learn, in influencing their response to feedback. Knowing these factors helps teachers design better feedback that is useful for every student. Finally, including statistics from a bigger range of students from different types of schools could make the findings more useful to everyone. If we track students' results in detail over a number of years with longitudinal studies, we could understand better the way feedback helps with their learning. Studying these issues might guide the creation of better feedback techniques, making it easier for educators to boost their students' long-term progress in both school and everyday life.

Summing up, the research points out that timely, detailed and positive feedback is very important for improving student involvement and success in school. Results indicate that providing clear and positive feedback to students can greatly increase their motivation and their academic outcomes. Teachers should pay special attention to giving feedback that reaches each student at the right time and with the right methods. In particular, constructive feedback helps learners review their work, grow and learn more from what they've studied. If educators give feedback that is direct, understandable and easy to

implement, students can see where they should improve and remember what they are good at.

Additionally, teachers should make sure the environment offers plenty of useful feedback to help students learn continuously. This approach both raises student commitment and helps build a good learning climate, contributing to students' long-term success in school work. Therefore, teachers are encouraged to use feedback that helps students improve in many areas and contributes usefully to their learning.

REFERENCES

Ajjawi, R., & Regehr, G. (2019). When I say… feedback. *Medical Education, 53*(7), 652–654. https://doi.org/10.1111/medu.13746

Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability, 21*(1), 5-31. https://doi.org/10.1007/s11092-008-9068-5

Boud, D., & Molloy, E. (2013). Rethinking models of feedback for learning: The challenge of design. *Assessment & Evaluation in Higher Education, 38*(6), 698–712. https://doi.org/10.1080/02602938.2012.691462

Brookhart, S. M. (2023). How to give effective feedback to your students. ASCD.

Carless, D. (2006). Differing perceptions in the feedback process. *Studies in Higher Education, 31*(2), 219–233. https://doi.org/10.1080/03075070600572132

Carless, D. (2015). Excellence in university assessment: Learning from award-winning practice. *Routledge.*

Deci, E. L., & Ryan, R. M. (2020). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford Publications.

Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Gan, Z., & Liu, F. (2022). The effects of teacher feedback on student motivation: A review. *Educational Psychology Review, 34*(2), 289-310. https://doi.org/10.1007/s10648-022-09645-8

García-Peñalvo, F. J., Corell, A., Abella-García, V., & Grande, M. (2021). Online assessment in higher education during the COVID-19 pandemic: A systematic review. *Frontiers in Psychology, 12*, 697045. https://doi.org/10.3389/fpsyg.2021.697045

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1), 81–112. https://doi.org/10.3102/003465430298487

Henderson, M., Ryan, T., & Phillips, M. (2019). The challenges of feedback in higher education. *Assessment & Evaluation in Higher Education, 44*(8), 1237–1252. https://doi.org/10.1080/02602938.2019.1599815

Jonsson, A., & Roos, A. (2017). Student perceptions of feedback and their understanding of the feedback process: The influence of individual differences and feedback quality. *Assessment & Evaluation in Higher Education, 42*(2), 293-309. https://doi.org/10.1080/02602938.2016.1154999

Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education, 31*(2), 199-218. https://doi.org/10.1080/03075070600572090

Shute, V. J. (2008). Focus on formative feedback. *Review of Educational Research, 78*(1), 153-189. https://doi.org/10.3102/0034654307313795

Shute, V. J. (2022). Focus on formative feedback. *Review of Educational Research, 78*(1), 153-189. https://doi.org/10.3102/00346543211044556

Topping, K. J. (2009). Peer assessment. *Theory into Practice, 48*(1), 20-27. https://doi.org/10.1080/00405840802577569

Van der Kleij, F. M., Adie, L. E., & Cumming, J. J. (2019). A meta-review of the student role in feedback. *International Journal of Educational Research, 98*, 303–323. https://doi.org/10.1016/j.ijer.2019.09.005

Wisniewski, B., Zierer, K., & Hattie, J. (2021). The power of feedback revisited: A meta-analysis of educational feedback research. *Educational Research Review, 34*(3), 120-135. https://doi.org/10.1016/j.edurev.2021.100389

Winstone, N. E., & Nash, R. A. (2016). The developing engagement with feedback toolkit (DEFT). *The Higher Education Academy*.