A Correlational Study of Feedback and Motivation among Students at Elementary Level

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ABSTRACT

Feedback and motivation play a very prominent role in improving the teaching learning experiences of the students. But it is often observed that most of the time not much attention is given to both of the variables. In the present study an attempt has been made by the research scholar to find out the correlation between feedback and motivation. A sample of 440 students from elementary grade has been drawn for the study. Various tools and techniques have been used by the investigator for analysing the collected data. The findings of the study suggest that feedback and motivation are positively correlated. The results of the study also reveal that gender is not a discriminating factor in motivating students at elementary level of education.

Keywords: Feedback, Motivation

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1. INTRODUCTION

Every student of the discipline of education and every aspiring teacher must understand the wider meaning of education, its conceptual features and different perspectives that have shaped its meaning from time to time. Understanding the concept of education and its dynamic features will help develop insights into the purpose of becoming a teacher. There is a narrower but more practical definition of education as a process of teaching and learning in a school or school-like environment. To make this process of teaching and learning more effective and productive students in the schools must helped by the teacher in every possible way. The teacher can help the students by identifying the strengths and weaknesses of students and accordingly suggest the necessary measures to improve the same.

2. FEEDBACK

The first studies and theories about feedback are almost 100 years old and arose out of the psychological perspective called behaviourism (Thorndike 1913). Positive feedback was considered "positive reinforcement," and negative feedback was considered "punishment." Both reinforcement and punishment affect learning; thus, feedback was theorized to be effective. Educational theorists no longer explain learning with behaviourist theories of stimulus and response. More recent studies recognize the role of the student in the feedback process. They study the kind of feedback given and the context in which it is given. Feedback is a powerful tool for shaping learning and motivation at all academic stages (Hattie &Timperley, 2007). Feedback, if done well, can be very effective in improving learning outcomes.

A. Objective of Feedback

The purpose of feedback is to close the gap between a student's achievement and the desired goals. This is achieved with the help of formal assessment and informal assessment, the result of which is communicated to the learner in writing or orally. The most desirable forms of feedback will contain a judicious mix of cognitive and motivational factors. Good feedback gives students information they need to be able to understand what the goals are, where they stand in their learning and what they should do next—together these constitute cognitive factors. Once they feel they understand what to do and why, most students develop a feeling that they have control over their own learning—this is the motivational factor. Good feedback contains information that a student can use, which means that the student has to be able to hear and understand it. Students can't hear something that's beyond their comprehension; nor can they hear it if they are not listening. Sometimes even well-intentioned feedback can produce undesirable results if it fails to promote students' feelings of control and self-efficacy.

B. Some Important Characteristics of Effective Feedback

Feedback is an integral part of the process of teaching and learning. Its aim is to bring about an improvement in the student's learning by realigning his or her effort with the desired outcome. It can be about the output of the activity, the process of the activity, the student's management of his or her learning (self-regulation), or learners as individuals.

Some desirable qualities of feedback are:

- It should be delivered in an appropriate setting. Setting refers to place and time. Sometimes it may be desirable to deliver feedback in a classroom setting. Often it may be desirable to deliver it one-to-one.
- It should be goal-referenced. If the goal is not clearly stated and understood, both performance and feedback will suffer. If the desired outcome is clearly stated, feedback will tell the learner whether to continue as before or change course.
- It should deliver actionable information. Praise is often welcome but it does not tell the learner what s/he has done to deserve praise. Censure or blame does not provide concrete information either. The learner needs helpful data or facts based on which s/he can adjust his/her efforts.
- It should be user-friendly. In other words the learner should be able to understand it fully.
- It should be timely. This is not to say that it should be immediate, but it should be so timed as to enable the learner to connect the feedback with the performance to which it is related.
- It should be an ongoing process, thereby affording the student many opportunities for course correction.
- It has to be consistent. This involves teachers arriving at a consensus on what constitutes good performance and what doesn't. Often it takes the form of a Feedback Rubric showing the assessment criteria for an assignment. It ensures that the student gets stable and reliable feedback.

C. Types of Feedback

It has been noted above that feedback takes many forms. Now we will attempt to identify the various types of feedback in a teaching-learning environment.

- **Oral and Written**: Usually written feedback follows the performance of a task by the learner whereas oral feedback takes place during a lesson. Both are equally important.

- **Evaluative and Descriptive:** Evaluative feedback can take the form of grades (A, B+, B etc) or it may consist of such comments as 'excellent', 'well done' or 'improvement needed'. They tell the student something but not enough for him or her to use it for improvement where needed. If handed out carelessly these comments can actually be counterproductive. Still this type of feedback is very common. Written Feedback, on the other hand, provides students detailed information and guidance about improving their learning.

- **Formal and Informal**: Formal feedback is usually imparted at the conclusion of a task. It may be in writing or it may be orally transmitted in periodic meetings with groups of students. Informal feedback is giving during a lesson or in the course of the performance of a task. It is almost always oral.

- **Teacher, Peer and Self**: We have been mostly speaking of teacher feedback so far, therefore further elucidation is not required. Peer feedback refers to students giving feedback to each other. In addition to the normal feedback that occurs among students, this form of feedback can also be structured (e.g. student conferences). Self-feedback is the aim of all kinds of feedback. To equip the learner for assessing his own work and making course correction is the ultimate purpose of other types of feedback. For example, a student who understands how to use a dictionary to maximum advantage can continually self-assess his achievement with regard to spelling, pronunciation and vocabulary.

- **Positive and Negative**: The most obvious form of positive feedback is praise. This kind of feedback builds a positive self-concept in the learner and motivates him/her to continue the existing level of effort or to better it. There is conflicting evidence for how effective praise really is. Negative feedback is more common in the classroom. Teachers typically use negative feedback such as disapproval and reprimand to discourage disruptive behaviour or to generate greater effort at a task (Conroy et al, 2014). Corrective Feedback is a form of negative feedback which aims at removing errors and/or mistakes. These forms of feedback are the focus of the present study. Therefore we will discuss them in a separate section in greater detail.

- **Feedback to Parents/Family**: Reporting to parents and families commonly occurs at least twice per year in a formal written statement from the school. It is desirable to involve parents and families in the learning process. Frequent feedback about their child's progress, with advice about what they can do, has been shown to be effective in improving student achievement.

- **From Learner and Parent to Teacher**: In an interactive class the teacher can often get valuable feedback about her own performance from her students. Just observing the class can provide useful clues about what interest students and what doesn't. Interaction with parents and even simple 'thank-you' notes from parents can impact overall performance.

3. MOTIVATION

Etymologically the word motivation has its roots in the Latin word "movere" which means "to move". It is a general term applied to the entire class of drives, desires, needs, wishes and similar forces. This is probably the simplest explanation of motivation. Motivation can be considered the state of having encouragement to do something.

A student's motivation for learning is generally regarded as one of the most critical determinants of the success and quality of any learning outcome (Mitchell, 1992).According to R. C. Gardener to be motivated, the learner needs to have something to look forward to, a purpose related to goal or objective. Though there exists no consensual definition of motivation in psychology the definitions given by most of the psychologists rest firmly on the notion of movement. It is defined as energization and direction of behaviour. The Encyclopaedia of Management states that "Motivation refers to degree of readiness of an organism to pursue some designated goal and implies the determination of the nature and locus of the forces, including the degree of readiness." Berelson and Steiner opine that "A motive is an inner state that energizes, activates, or moves and directs or channels behaviour goals."

S. K. Mangal adopted an operational definition of motivation:

'*Motivation as a process or behaviour refers to reinforced, selective and goal-directed behaviour initiated and energized by a motive which aims to maintain balance and equilibrium of the person in relation to his environment by keeping his basic needs satisfied*'.

A. Types of Motivation

There can two broad classification of motivation:

> ➢ Extrinsic motivation

> ➢ Intrinsic motivation

- **Extrinsic Motivation**: When an individual learns because of some external rewards such as good grade, competition he/she is said to be extrinsically motivated.

- **Intrinsic Motivation**: When an individual's learning is affected by internal rewards such as happiness and pleasure, he/she said to be intrinsically motivated.

B. Difference between Intrinsic and Extrinsic Motivation

External motivation is not functionally related to the task whereas internal motivation is so related. This means that the task per se is a source of pleasure in the case of intrinsic motivation; but it is not so in extrinsic motivation. In the latter case motivation comes from an expected reward.

Applied to the learning experience, intrinsic motivation is said to have taken place when the student enjoys learning for its own sake. External motivators, on the other hand, take the form of good grades, praise, learning a skill to earn a livelihood and so on. It is generally believed that intrinsic motivation, which translates into spontaneous inspiration and stimulation, brings better results in the teaching-learning process. However, real life experience shows that extrinsic rewards have a place in learning too. Depending upon the learning situation and the nature of the task, the choice for providing appropriate motivation falls to the teacher.

Teachers should foster intrinsic motivation. If students are only interested in receiving grades or praise, and do not enjoy learning, teaching may prove to be difficult. Students may not wish to think or apply their knowledge. They may only be concerned with what will be asked in the tests. In contrast, students who are intrinsically motivated may enjoy challenging work, and may think in greater depth about ideas. Teachers may be able to foster intrinsic motivation by having students work on projects that allow them to see how the information is relevant to their lives.

It can be observed from the literature available in the field of feedback and motivation that though much work has been done in these field but most of the work has been done in secondary and college level.

4. PROBLEM STATEMENT & HYPOTHESES

Statement of the Problem: The present study is an attempt to find out the correlation between feedback and motivation among students of Vidisha district at elementary level.

Objectives of the Study: This study was undertaken with the following objectives in mind:

- To compare the level of motivation of students studying in different classes

- To compare the level of motivation of boys and girls,

- To find out the relationship between feedback and motivation of elementary level students,

Hypotheses of the Study: Keeping in view the objectives of the study the following hypotheses have been drawn:

Ho1: There will be no significant difference in mean scores of motivation among the students of different classes;

Ho2: There will be no significant difference between the mean scores of motivation of boys and girls;

Ho3: There will be no significant relationship between feedback and students' motivation;

Methodology: To achieve the objectives of the study a sound, systematic and authentic methodology is required. The methodology applied to carry out the present study will be derived from the methods of the descriptive research.

Sample: A sample of 440 elementary level students including boys and girls was drawn from the five different government and privately managed schools of Vidisha district. The sample comprised 222 boys and 218 girls from classes sixth, seventh and eighth. These schools were affiliated to Central Board of Secondary Education.

Tools: The investigator used the Achievement Motivation Scale developed by PratibhaDeo and Asha Mohan. The scale consisted of 50 statements with five point rating scale. Students were asked to choose the option which they think is right. They were given one hour to complete the test. The scoring was done on the basis of the Scoring Manual of the Achievement Motivation Scale. Feedback was measured by a five point scale developed by the investigator.

Statistical Techniques Used: Statistical techniques like Mean, standard deviation, ANOVA, t test and coefficient of correlation were used for the present study by the investigator.

Analysis and Interpretation of Data: The results of the present study are interpreted along with table here as under in which the different hypotheses were tested.

Ho1: There will be no significant difference in the mean scores of motivation among the students of different classes.

Table 1: Analysis of variance of mean scores of motivation among students of
Classes VI, VII & VIII

Variable	Group Means			Source of Variance	Sum of Squares	df	Mean squares	F-ratio
	VI	VII	VIII					
Motivation	137.04	138.17	144.19	B:	5644.38	2	2822.19	5.67*
				W:	217477.94	437	497.661	$p > 0.05$

*Significant at 0.05 level of confidence.

N = 440

B: Between Group Variance

W: Within Group Variance

Value of 'F' needed for significance at:

0.05 level with (2, 437) df = 3.02

Table 1 presents the group means for the three class, i.e., sixth, seventh and eighth which is 137.04, 138.17 and 144.19 respectively. It shows the significant F-ratio for motivation scores of students. The obtained value of F was 5.67 which is higher than the significant value at 0.05 level of confidence. The needed value of 'F' to be significant at 0.05 level with 2 and 437 degree was 3.02. Since the obtained F-ratio is higher than the significant value it can be inferred that there exists a variance among the three groups being studied. Therefore, the hypothesis that there will be no significant difference in the mean scores of motivation among the students of different classes is rejected in the light of above findings. The difference among the mean motivation scores have also been represented using a graph.
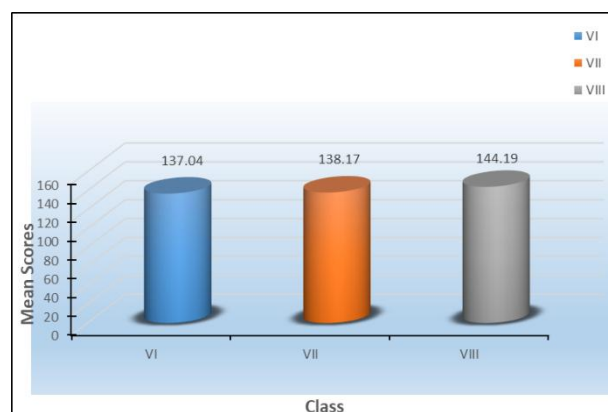

Figure 1.   Mean Motivation Scores of Students Studying in Classes VI, VII & VIII

H02: There will be no significant difference between the mean scores of motivation of boys and girls.

The means scores of motivation for boys and girls were compared by using 't' ratio and the results have been presented in Table 2

**Table 2: Comparison of mean scores of motivation of boys and girls of
classes VI, VII & VIII**

Group	Mean ± S. D.	Mean Difference	N	Standard error of mean	't'
Boys	140.94 ± 22.53	0.75	440	1.51	0.35 p>0.05
Girls	141.69 ± 23.17			1.56	

*Not Significant at .05 level of confidence
't' needed for significance at 0.05 level
of confidence with 438 degrees of freedom is 1.97

Table 2 presents the 't' value for mean scores of motivation of boys and girls of classes sixth, seventh and eighth. The difference between the mean scores of boys and girls is 0.75. The obtained 't' value was 0.35. The required value of 't' to be significant at 0.05 level of confidence is 1.97. Since the obtained t-value (0.35) is insignificant at 0.05 level of confidence with 438 degrees of freedom, the hypothesis that "there will be no significant difference between the mean scores of motivation of boys and girls" is accepted. So it can be inferred that there does not exist much difference between the mean scores of motivation of boys and girls.

Ho3: There will be no significant relationship between feedback and students' motivation.
The coefficient of correlation was obtained for relationship between feedback and motivation and is presented in table 3.

Variables	N	r
Feedback Motivation	440	0.289*

*Significant at 0.05 level of confidence

The results presented in Table 3 reveals an insignificant relationship between feedback and motivation scores of students studying at elementary level. The obtained value of coefficient of correlation was 0.289 which is more than the needed value of 'r' (0.117) at 0.05 level of confidence. Therefore the hypothesis that there will be no significant relationship between feedback and students' motivation' is rejected. Thus it can be inferred from the table that there is a positive correlation between the two variables being studied.

Major Findings: The major findings of the study are:

- There exists a significant difference among the mean motivation scores of the three classes, i.e. classes sixth, seventh and eighth.
- The mean scores of motivation between boys and girls showed an insignificant difference. It shows that both boys and girls were similarly motivated at elementary level. Gender did not play a prominent role in motivating students at elementary level.
- The correlation between the variables feedback and motivation resulted a significant and positive score. The finding of the study reveals that appropriate feedback by the teacher can motivate students to perform better.

CONCLUSION

Within its limitations the present study has implications for administrators, teachers, parents and above all the society itself. On the basis of the overall results it can be concluded that the motivation of students varies with respect to their grades, the results of the study indicated that the motivation level improves as the grades increases. No significant difference was found between the motivation level of boys and girls. The obtained value was too small to be called significant. The correlation between the variables, feedback and motivation, was found to be significantly positive. It can be inferred from the findings that teachers should use appropriate feedback in the classrooms to make teaching learning process more interesting and effecting for students. So keeping in view earlier studies and present findings it can be suggested that many such studies can be taken up at different locale and also level of education.

In today's complex and competitive world, students do need help from teachers and parents to cope up better. Everybody needs a conducive environment for continuous growth and to be a successful human being. Therefore, the role of the teacher in encouraging students to realize their strengths can never be overestimated.

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