

## EFFECT OF INTEGRATED FEEDBACK ON TEACHER MORALE OF SECONDARY SCHOOL TEACHERS

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### Abstract

Integrated feedback based on student evaluation of teachers and teachers' self evaluation was taken as treatment in the present study. Teacher morale of secondary school teachers was dependent variable in the study. The present study was Experimental in nature and Non Equivalent Control Group Design suggested by Campbell and Stanley (1963) was adopted for study. Sample of the study comprised of 77 secondary school teachers and 220 students of 4 English medium and CBSE affiliated schools of Indore city. It was sampled purposively. Null hypotheses were formulated and ANCOVA was used for testing of the null hypotheses. Pre- teacher morale and Intelligence were taken as covariates. Interactional effect of treatment with Intelligence, Gender, Job satisfaction and Experience of teachers were also studied. The treatment was found effective on Teacher Morale of secondary school teachers. The study has great uses for teachers, students and school administrators.

**Keywords:** Student Evaluation of teachers, Teachers' self evaluation, Teacher morale, Integrated feedback, Evaluation of teachers.

### INTRODUCTION

In the present scenario most of the teachers and educational institutions are facing problems about maintaining the status of teaching and qualitative improvement in teaching-learning process. These problems are occurring due to changing needs and expectations of the society. Rapid changes and innovations in the information and communication technology are also imposing this type of problems because most of the pupils get the curricular related information early before classroom teaching in satisfactory manner and then they (students) rate their teachers indirectly. Teachers and educational institutions do not come to know what are happening in students' mind and what perceptions students have about teachers' performance. In this way we can say that the students are tending to evaluate their teachers work in informal ways. If we think about administration related perspectives, main interest of every administration is on whether the teaching- learning process was fruitfully completed or not and for this purpose every administration wants to evaluate their teachers. In both of the cases i.e. at students' point of view and administration point of view teachers are expected to do their job according to the needs of best possible learning outcomes. That's why evaluation of teachers is in practice (formally or informally).

Many institutions in the United States have included teaching as a component of their Tripartite Mission Research Teaching and Extension) since their inception. Until recent years, however, excellence in teaching has seldom been rewarded. Due to public perceptions of poor teaching and pressure from state government and federal government leaders, the teaching roll at the universities has been magnified (Rudd, Baker, Hoover, 1996). Universities are struggling to identify and reward good teaching. In Indian context the same problem of public perceptions about poor teaching may be easily seen. Therefore it is suggested to adopt the same solution here also i.e. adopting evaluation of teaching performance for the sake of improvement. Thinking about the administration related perspectives of teachers' evaluation, most of the self financial educational institutions pre: suggesting teachers' evaluation for promotion and salary increment purposes. On the other hand many educational institutions, government and non-government agencies of education are suggesting teachers' evaluation because they are aware about qualitative improvements in teaching-learning

process. This is a positive approach because the expected end-products of these practices are improvements in the teaching-learning process. But for this sake some kind of malpractices came to the fashion, like evaluation of teachers on the basis of the results of the students' or on the basis of students' achievement. This type of teachers' evaluation should not be considered as a valid source of getting information about teaching performances of teachers', because the main purpose of evaluation of students' achievement is differ in sufficient manner. In a paper presented at the annual meeting of the Conference on College, Composition and Communication (1991) C. Gould suggested that Peer Evaluation, Student Evaluation and Self Evaluation are all valid forms of evaluating teaching performances. Soderberg (1986) stated that when evaluating teachers at the delivery phase of instructions, students are the most qualified to accomplish this task. Accepting the importance of student evaluation of teachers The Universities of British Columbia (Vancouver) has approved "A Policy of Student Evaluation of Teaching" (May 16<sup>th</sup>, 2007). Concluding these efforts made earlier researcher found three ways of successful improvement of instructions, which are Student-evaluation of teachers, Self- evaluation of teachers and Peer-evaluation of teachers respectively.

The term Self-evaluation of teacher refers to the process of collecting and analyzing relevant information about the teacher himself or herself. The fundamental involved in this process is that teachers should also see themselves as learners. In many of the European countries Self-evaluation of the teachers is in major practice. Some of the Indian educational institutions have also adopted this type of evaluation. Guru Nanak Dev University (GNDU) Amritsar became the first Indian University to adopt "Manual for self-study" derived by National Assessment and Accreditation Council (NAAC). University Grant Commission (UGC) in its "Schemes of Autonomous Colleges" has also suggested the colleges to adopt Self-appraisal of teachers as common programme. According to Richard M. Felder and Rebecca Brent (North Carolina State University) in the article How to Evaluate Teaching (2004) "Students are in better position than anyone else to judge certain aspects of teaching, such as how clear, interesting, respectful and fair a course instructor is, and they are the only ones who can say how an instructor has influenced their attitude towards the course subject their motivation to learn it and their self-confidence." McKeachie (1997) supported student evaluation of teachers' with considering it as the single most valid source of data on teaching. The University of British Columbia (UBC) had approved a policy on student evaluation of teaching while considering its importance.

After reviewing the theoretical contributions made earlier the researcher felt the need of more studies in the context of teacher evaluation at secondary level in many directions. Jones (1983) conducted a study on student rating of teaching and found that teachers' personality as perceived by students was still very significantly related to rating of teaching quality. It was argued that "there is a proper state of affairs which does not undermine the validity of student ratings." in another study conducted by Centra (1972) it was found that teachers generally evaluated their teaching somewhat differently from the way their students evaluated it. Nasser and Fresko (2006) concluded a study with a suggestion of using student ratings and instructors predictions to motivate teaching improvement. An attempt made by Sharma & Passi (1976) the interaction effect of the different techniques of feedback and the effect was found not to be significant. Chiplunker (1980) found that few items reflecting Job satisfactions of teachers needed to be included in the tool of self assessment of teachers. Mishra (1983) also found significant and positive behavioural changes in teachers as a result of receiving feedback. Mishra (1985) found that the teaching behaviour of the teachers could be changed in a positive direction by giving feedback information in the way of self rating and class rating. Mishra, Brundaban and Patel (1990) found that after giving feedback, the teachers became more indirect and less direct in their behaviour; the students began to like them more. In an attempt, Prokosh (1990) noted the change in both, directly observed measures as well as in the perceptions of the teaching assistants and their students. Appleton (2000) in his study found that the teachers who received feedback, there were significant changes in pupil ratings in their classes, indicating more satisfaction and friction. It also revealed that giving the teachers feedback as well as information may enhanced pupil engagement. Chandel (1981) found that the relationship between self-rating and students' rating was not significant, but in another study Balchandran (1981) found that student rating and self

rating of teaching were positively and significantly related. Moreover the study revealed that the self rating was significantly higher than the students' ratings. Mishra (1983) found that the self rating was most effective source of feedback but student rating were also effective in changing behaviour. A study conducted by Prabhune, Marathe and Sohani (1984) researchers found that all the three strategies of giving feedback (College supervisor, self and peers feedback) were equally effective. Mishra (1985) found the difference between feedback effect by self rating and class-rating was highest for language teachers. Mishra (1985) concluded that female teacher were highly susceptible to behaviour change through feedback. Significant differences were found between the subgroups of male & female, arts and science in their teaching efficiency through self evaluation in a study conducted by Narayanappa and Akhtar (2000). LaForge (2003) found that students rate male teachers higher than they rated female teachers. Bentley and Rempel (1963) in a study found that the I.Q. level played an important role in comparing of teachers on the basis of Teacher morale. Mahatma (1980) in a study concluded that the authentic aspect of actual classroom was significantly related to teachers' classroom behaviour (Which represents the level of Teacher morale). An attempt made by Jain (1982) it was found that Gender is not significantly related to any dimension of Teachers' morale. Teven (2007) suggested that the teachers should maintain appropriate classroom behaviour. After a detail study of these entire researches and findings the researcher came to know that improvement of teaching is an important need of the educational systems, therefore more works are needed to contribute in these perspectives. The researcher has selected Integrated feedback based on student evaluation of teachers and teachers' self evaluation as treatment. The researcher found in the researches discussed earlier that Teacher morale might have some influences on teaching-learning process, but enough studies were not found in the chosen area of study. Therefore Teacher morale was included in this effort of study.

**Statement of the problem:** The problem was worded as "Effect of Integrated Feedback on Teacher morale of Secondary School Teachers"

#### **Definition of the Terms used in the Title**

**Integrated Feedback:** Integrated Feedback refers to the feedback based on the information collected from student evaluation of teachers and teacher's self evaluation.

**Student evaluation of teachers:** The process in which students help their teacher to improve his/her (teachers') classroom performance by giving information about their classroom teaching and classroom behaviour.

**Teachers' self evaluation:** The process by which, teachers refine their skills through reflecting upon element of their own instruction.

**Teacher morale:** The mental or emotional conditional (as of enthusiasm, confidence and loyalty) of a teacher with regard to the academic function or task at hand.

**Research Objectives:** Researcher formulated following objectives for the study.

1. To study the effect of Integrated feedback on Teacher morale by considering Intelligence as covariate.
2. To study the effect of Integrated feedback, Intelligence and their interaction on Teacher morale by considering pre-Teacher morale as covariate.
3. To study the effect of Integrated feedback, Gender and their interaction on Teacher morale by considering pre-Teacher morale as covariate.
4. To study the effect of Integrated feedback, Job satisfaction and their interaction on Teacher morale by considering pre-Teacher morale as covariate.
5. To study the effect of Integrated feedback, Experience and their interaction on Teacher morale by considering pre-Teacher morale as covariate.

## METHODOLOGY

**Sample:** The present study was experimental in nature. The sample of the study comprised of 77 secondary school teachers belonging to four different schools of Indore city. These schools were selected by purposive sampling technique and all the teachers teaching in secondary classes during 2014 – 15 were taken as sample. The treatment was assigned randomly. 5 students of each secondary class taught by the teachers were also taken as sample in the present study. These students were selected randomly from each class taught by the secondary school teachers of experimental group and control group. There were 220 students in the sample. The schools had comparable management and teacher recruitment policies respectively and comparable quality of education being imparted to their students. Students' clientele too were almost similar in their parental socio-economic and cultural backgrounds. There were thirty two male teachers and forty five female teachers taken in the sample of the study.

**Experimental Design:** The present study was Experimental in nature and Non Equivalent Control Group Design suggested by Campbell and Stanley (1963) was adopted for study. There were two groups of schools; one of which was randomly designated as Experimental Group and the other one as Control Group. Both the groups were pre-tested by administering Teacher morale Test, Intelligence Test and Job satisfaction Scale on the teachers. The treatment was provided to sampled secondary school teachers of Experimental Group in the form of Integrated Feedback based on Student Evaluation of Teachers and Teachers' Self Evaluation. The effect of treatment was analyzed by post administered Teacher morale Test.

**Tools:** The variables to which the data were collected were Teacher morale, Job satisfaction and Intelligence of teachers. Raven's Standard Progressive Matrices test was used to assess intelligence and Job satisfaction Questionnaire was used to measure Job satisfaction. Teacher morale was studied by Teacher morale scale developed by Jamal & Raheem.

**Procedure of Data Analysis:** One way ANCOVA was used to study the first objective and 2X2 Factorial Design ANCOVA is used to study the rest 4 objectives.

## RESULTS

### 1. Effect of Integrated Feedback on Teacher morale of secondary school teachers by considering Intelligence as covariate.

The first objective was to study the effect of Integrated Feedback from Student Evaluation of Teachers and Teachers' Self Evaluation in terms of Teacher morale by considering Intelligence as covariate. There were two levels of Integrated Feedback namely Integrated Feedback and no feedback. First level of Integrated Feedback was taken as experimental group and second level was taken as control group. There were 40 secondary school teachers in experimental group and 37 in control group. The data were analyzed with the help of ANCOVA. The results are given in table no 1.1.

Table 1.1: Summary of ANCOVA for Teacher morale by considering Intelligence as covariate

Source	df	SSy.x	MSSy.x	Fy.x	Sig.
Integrated Feedback	1	1294.476	1294.476	18.743	0.000
Error	74	5110.827	69.065		
Total	75				

From table 1.1 it can be seen that the adjusted F-value for Integrated Feedback is 18.743 whose level of significance with df (1, 74) is 0.000, therefore it is significant at 0.01 level of significance.

This shows that the adjusted mean score of Teacher morale of Experimental group significantly differ from Control group when Intelligence was taken as covariate. Thus the null hypothesis that 'There is no significant effect of Integrated Feedback from student evaluation of teachers and teachers' self evaluation on Teacher morale by considering Intelligence as covariate' was rejected at 0.01 level of significance.

Table 1.2: Adjusted mean scores of Teacher morale of experimental group and control group

Group	Adjusted Mean
Experimental Group	127.0
Control Group	118.8

Further from table 1.2 it can be seen that the adjusted mean score of Teacher morale of experimental group i.e. 127.0 was found to be significantly higher than the adjusted mean score of control group i.e. 118.8. Hence it can be concluded that Integrated Feedback provided to the secondary school teachers was found to be effective in terms of Teacher morale of secondary school teachers, when Intelligence was taken as covariate.

## 2. Effect of Integrated Feedback, Intelligence and their interaction on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.

The second objective was to study the effect of Integrated Feedback, Intelligence and their interaction on Teacher morale by considering pre-Teacher morale as covariate. There were two levels of Integrated Feedback namely Integrated Feedback and no Feedback. First level of Integrated Feedback was taken as experimental group and second level was taken as control group. There were 40 secondary school teachers in experimental group and 37 in control group. On the basis of Intelligence the subjects were divided into two levels namely above average and below average. There were 42 teachers were in above average level and 35 were in below average level. The data were analyzed with the help of 2X2 Factorial Design ANCOVA. The results are given in table no. 2.1

Table 2.1: Summary of 2X2 Factorial Design ANCOVA for Teacher morale by considering pre-Teacher morale as covariate

Source	df	SSy.x	MSSy.x	Fy.x	Sig.
Integrated Feedback	1	1110.178	1110.178	20.625	0.000
Intelligence	1	39.973	39.973	0.743	0.392
Integrated Feedback* Intelligence	1	5.743	5.743	0.107	0.745
Error	72	3875.618	53.828		
Total	75				

### Effect of Integrated Feedback on Teacher morale of secondary school teachers considering pre-Teacher morale as covariate.

From table 2.1, it can be seen that the adjusted F-value for Integrated Feedback is 20.625 whose level of significance with df (1, 74) is 0.000, therefore it is significant at 0.01 level of significance.

This shows that the adjusted mean score of Teacher morale of experimental group differ significantly from control group when pre-Teacher morale was taken as covariate. Thus, the null hypothesis that

'There is no significant effect of Integrated Feedback on Teacher morale when pre- Teacher morale was taken as covariate' was rejected at 0.01 level of significance.

Table 2.2: Adjusted mean scores of Teacher morale of experimental group and control group

Group	Adjusted Mean
Experimental Group	126.7
Control Group	119.0

Further from table 2.2 it can be seen that the adjusted mean score of Teacher morale of experimental group i.e. 126.7 was found to be significantly higher than the adjusted mean score of control group i.e. 119.0. Hence it can be concluded that Integrated Feedback provided to the secondary school teachers was found to be effective in terms of Teacher morale of secondary school teachers when pre Teacher morale was taken as covariate.

### Effect of Intelligence on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.

From table 2.1 it can be seen that the adjusted F- value for Intelligence is 0.743, which is not significant even at 0.05 level of significance. Therefore, the null hypothesis that 'There is no significant effect of Intelligence on Teacher morale by considering pre-Teacher morale as covariate' was not rejected. It can thus be concluded that the Teacher morale of secondary school teachers' is independent of Intelligence of secondary school teachers when pre-Teacher morale was taken as covariate.

### Effect of interaction between Integrated Feedback and Intelligence on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.

From table 2.1, it can be seen that the adjusted F-value for the interaction between the Integrated Feedback and Intelligence is 0.107, which is not significant even at 0.05 level of significance. Therefore, the null hypothesis that 'There is no significant effect of interaction between Integrated Feedback and Intelligence on Teacher morale by considering pre-Teacher morale as covariate' was not rejected. Thus it can be concluded that the Teacher morale of secondary school teachers' is independent of interaction between Integrated Feedback and Intelligence when pre-Teacher morale was taken as covariate.

### 3.0 Effect of Integrated Feedback, Gender and their interaction on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.

The third objective was to study the effect of Integrated Feedback, Gender and their interaction on Teacher morale by considering pre-Teacher morale as covariate. There were two levels of Integrated Feedback namely Integrated Feedback and no Feedback. First level of Integrated Feedback was taken as experimental group and second level was taken as control group. There were 40 teachers in experimental group and 37 teachers in control group. On the basis of Gender the subjects were divided in to two levels namely male and female. There were 32 male and 45 female teachers. The data were analyzed with the help of 2X2 Factorial Design ANCOVA. The results are given in table no. 3.1.

Table 3.1: Summary of 2X2 Factorial Design ANCOVA for Teacher morale by considering pre-Teacher morale as covariate

Source	df	SSy.x	MSSy.x	Fy.x	Sig.
Integrated Feedback	1	1062.529	1062.529	19.643	0.000
Gender	1	15.155	15.155	0.280	0.598
Integrated Feedback * Gender	1	8.301	8.301	0.153	0.696
Error	72	3894.719	54.093		
Total	75				

**Effect of Integrated Feedback on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.**

From table 3.1, it can be seen that the adjusted F-value for Integrated Feedback is 19.643 whose level of significance with df (1, 74) is 0.000, therefore it is significant at 0.01 level of significance. This shows that the adjusted mean score of Teacher morale of experimental group differ significantly from control group when pre-Teacher morale was taken as covariate. Thus, the null hypothesis that 'There is no significant effect of Integrated Feedback on Teacher morale when pre- Teacher morale was taken as covariate' was rejected at 0.01 level of significance.

Table 3.2: Adjusted mean scores of Teacher morale of experimental group and control group

Group	Adjusted Mean
Experimental Group	126.8
Control Group	119.1

Further from table 3.2 it can be seen that the adjusted mean score of Teacher morale of experimental group i.e. 126.8 was found to be significantly higher than adjusted mean score of control group i.e. 119.1. Hence it can be concluded that Integrated Feedback provided to the secondary school teachers was found to be effective in terms of Teacher morale of the secondary school teachers, when pre-Teacher morale was taken as covariate.

**Effect of Gender on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.**

From table 3.1 it can be seen that the adjusted F- value for Gender is 0.280, which is not significant even at 0.05 level of significance. Therefore, the null hypothesis that 'There is no significant effect of Gender on Teacher morale by considering pre-Teacher morale as covariate' was not rejected. It can thus be concluded that the Teacher morale is independent of Gender of secondary school teachers when pre-Teacher morale was taken as covariate.

**Effect of interaction between Integrated Feedback and Gender on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.**

From table 3.1, it can be seen that the adjusted F-value for the interaction between the Integrated Feedback and Gender is 0.153, which is not significant even at 0.05 level of significance. Therefore, the null hypothesis that 'There is no significant effect of interaction between Integrated Feedback and Gender on Teacher morale by considering pre-Teacher morale as covariate' was not rejected. Thus it can be concluded that the Teacher morale is independent of interaction between Integrated Feedback and Gender when pre-Teacher morale was taken as covariate.

**4.0 Effect of Integrated Feedback, Job satisfaction and their interaction on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.**

The fourth objective was to study the effect of Integrated Feedback, Job satisfaction and their interaction on Teacher morale by considering pre-Teacher morale as covariate. There were two levels of Integrated Feedback namely Integrated Feedback and no Feedback. First level of Integrated Feedback was taken as experimental group and second level was taken as control group. There were 40 teachers in experimental group and 37 teachers in control group. On the basis of Job satisfaction the subjects were divided in to two levels namely high and low. There were 45 teachers in high Job satisfaction level and 32 teachers in low Job satisfaction level. The data were analyzed with the help of 2X2 Factorial Design ANCOVA. The results are given in table no. 4.1.

Table 4.1: Summary of 2X2 Factorial Design ANCOVA for Teacher morale by considering pre-Teacher morale as covariate

Source	df	SSy.x	MSSy.x	Fy.x	Sig.
Integrated Feedback	1	957.161	957.161	18.715	0.000
Job satisfaction	1	235.313	235.313	4.601	0.035
Integrated Feedback * Job satisfaction	1	0.239	0.239	0.005	0.946
Error	72	3682.295	51.143		
Total	75				

**Effect of Integrated Feedback on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.**

From table 4.1, it can be seen that the adjusted F-value for Integrated Feedback is 18.715 whose level of significance with df (1, 74) is 0.000, therefore it is significant at 0.01 level of significance. This shows that the adjusted mean score of Teacher morale of experimental group differ significantly from control group when pre Teacher morale was taken as covariate. Thus, the null hypothesis that 'There is no significant effect of Integrated Feedback on Teacher morale when pre Teacher morale was taken as covariate' was rejected at 0.01 level of significance.

Table 4.2: Adjusted mean scores of Teacher morale of experimental group and control group

Group	Adjusted Mean
Experimental Group	126.2
Control Group	119.0

Further from table 4.2 it can be seen that the adjusted mean score of Teacher morale of experimental group i.e. 126.2 was found to be significantly higher than that of control group i.e. 119.0. Hence it can be concluded that Integrated Feedback provided to the teachers was found to be effective in terms of Teacher morale of the secondary school teachers, when pre Teacher morale was taken as covariate.

**Effect of Job satisfaction on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.**

From table 4.1 it can be seen that the adjusted F- value for Job satisfaction is 4.601, whose level of significance with df (1, 74) is 0.035, therefore it is significant at 0.05 level of significance. This shows that the adjusted mean score of high Job satisfaction teachers differ significantly than that of low Job satisfaction teachers. Thus the null hypothesis that 'There is no significant effect of Job satisfaction on Teacher morale by considering pre-Teacher morale as covariate' was rejected at 0.05 level of significance.

Table 4.3: Adjusted mean scores of Teacher morale of High Job satisfaction level and Low Job satisfaction level

Group	Adjusted Mean
High Job satisfaction	124.5
Low Job satisfaction	120.7

Further from table 4.3 it can be seen that the adjusted mean score of Teacher morale of high Job satisfaction level teachers i.e. 124.5 was found to be significantly higher than that of low Job satisfaction teachers i.e. 120.7.



Hence it can be concluded that the Integrated Feedback provided to the high Job satisfaction teachers was found to be effective in terms of Teacher morale of secondary school teachers when pre-Teacher morale was taken as covariate.

**Effect of interaction between Integrated Feedback and Job satisfaction on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.**

From table 4.1, it can be seen that the adjusted F-value for the interaction between the Integrated Feedback and Job satisfaction is 0.005, which is not significant even at 0.05 level of significance. Therefore, the null hypothesis that 'There is no significant effect of interaction between Integrated Feedback and Job satisfaction on Teacher morale by considering pre-Teacher morale as covariate' was not rejected. Thus it can be concluded that the Teacher morale is independent of interaction between Integrated Feedback and Job satisfaction when pre-Teacher morale was taken as covariate.

**5.0 Effect of Integrated Feedback, Experience and their interaction on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.**

The fifth objective was to study the effect of Integrated Feedback, Experience and their interaction on Teacher morale by considering pre-Teacher morale as covariate. There were two levels of Integrated Feedback namely Integrated Feedback and no Feedback. First level of Integrated Feedback was taken as experimental group and second level was taken as control group. There were 40 teachers in experimental group and 37 teachers in control group. On the basis of Experience the subjects were divided in to two levels namely above average and below average. There were 39 teachers in below average Experience and 38 teachers in above average Experience level. The data were analyzed with the help of 2X2 Factorial Design ANCOVA. The results are given in table no. 5.1

Table 5.1: Summary of 2X2 Factorial Design ANCOVA for Teacher morale by considering pre-Teacher morale as covariate

Source	df	SSy.x	MSSy.x	Fy.x	Sig.
Integrated Feedback	1	980.751	980.751	18.295	0.000
Experience	1	19.347	19.347	0.361	0.550
IntegratedFeedback * Experience	1	44.096	44.096	0.823	0.367
Error	72	3859.702	53.607		
Total	75				

**Effect of Integrated Feedback on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.**

From table 5.1, it can be seen that the adjusted F-value for Integrated Feedback is 18.295 whose level of significance with df (1, 74) is 0.000, therefore it is significant at 0.01 level of significance This shows that the adjusted mean score of Teacher morale of experimental group differ significantly from control group when pre Teacher morale was taken as covariate. Thus, the null hypothesis that 'There is no significant effect of Integrated Feedback on Teacher morale when pre-Teacher morale was taken as covariate' was rejected at 0.01 level of significance.

Table 5.2: Adjusted mean scores of Teacher morale of experimental group and control group

Group	Adjusted Mean
Exnerimental Group	126.8
Control Group	119.4

Further from table 5.2 it can be seen that the adjusted mean score of Teacher morale of experimental group i.e. 126.8 was found to be significantly higher than that of control group i.e. 119.4. Hence it can be concluded that Integrated Feedback provided to the teachers was found to be effective in terms of Teacher morale of the teachers, when pre Teacher morale was taken as covariate.

#### **Effect of Experience on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.**

From table 5.1 it can be seen that the adjusted F- value for Experience is 0.361, which is not significant even at 0.05 level of significance. Therefore, the null hypothesis that 'There is no significant effect of Experience on Teacher morale by considering pre-Teacher morale as covariate' was not rejected. It can thus be concluded that the Teacher morale is independent of Experience of secondary school teachers when pre-Teacher morale was taken as covariate.

#### **Effect of interaction between Integrated Feedback and Experience on Teacher morale of secondary school teachers by considering pre-Teacher morale as covariate.**

From table 5.1, it can be seen that the adjusted F-value for the interaction between the Integrated Feedback and Experience is 0.823, which is not significant even at 0.05 level of significance. Therefore, the null hypothesis that 'There is no significant effect of interaction between Integrated Feedback and Experience on Teacher morale by considering pre-Teacher morale as covariate' was not rejected. Thus it can be concluded that the Teacher morale of secondary school teachers is independent of interaction between Integrated Feedback and Experience when pre-Teacher morale was taken as covariate.

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