
Study of Correlation between Achievement on the Selection Tests and Performance at the Bed Examination

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Both practically and theoretically every commission which has examined the educational problems of the country has drawn pointed attention to the teacher's role and teachers quality. The Secondary Education Commission (1952-53)ⁱ is convinced that the most important factor in the contemplated educational reconstruction is the teacher - his personal qualities, his educational qualifications, his professional training and the place he/She occupies in the school as well as in the community. The reputation of a school and its influence on the life of the community invariably depend on the kind of teachers working in it. The Indian Education Commission report (1964-66)ⁱⁱ titled "Education and National Development" running in to about 1000 pages, also emphasized the important role of the teacher as an agent of economic, cultural and spiritual transformation of the nation. It forcefully stated.

Of all the different factors which influence the quality of education and its contribution to national development, the quality, competence and character of teachers are undoubtedly the most significant. Nothing is more important than securing a sufficient supply of high quality recruits to the teaching profession, providing them with the best possible professional preparation and creating satisfactory conditions of work in which they can be fully effective.

In concerned to this, The Secondary Education Commission (1952-53)ⁱⁱⁱ states "Recruitment of training colleges should be carefully made so as to admit only those who hold the highest promise of becoming successful teachers." The Education Commission (1964-66) also lays considerable emphasis on the proper selection of the candidates for admission to training institutions. It is very important but not an easy task to predict and select only those who will prove to be effective teachers. The Secondary Education Commission (1952-53) could not provide the valid procedure or tool for this purpose. After thirteen years, the education commission (1966) also failed to recommend any fool proof procedure of selection of candidates to the B.Ed. course and admitted its failure in the following words :-

The search for good and reliable methods of selection is one of the important problems in higher education and vigorous research is needed to evolve them. Even in advanced countries, satisfactory techniques of selection have not been developed as yet.

For many years many and varied selection procedures were in vogue in the teacher training institutions of U.P. To get rid of these the U.P. Government boldly laid down the criteria for the selection of candidates to the B.Ed. Course in Training Colleges and the Departments of Education, affiliated to the state universities in 1974. These criteria were, no doubt, the product of the minds of some great intellectuals and high officials, but they were not satisfactory.

Therefore, U.P. Government made first Amendment Rules in 1976. As the rules were made and amended arbitrarily, they were modified again in 1980. In the absence of any research on their validity, they were altogether replaced by selection tests in 1987. One cannot definitely say the superiority of the new procedure over the old ones without a comprehensive and reliable scientific study. Therefore, it was felt to test the validity of B.Ed. Selection Tests, lest the defective tests should adversely affect the quality of teachers in particular and standards of education in general.

The above discussion poses the following questions :-

- (i) Are the present B.Ed. Selection Tests of Dr. B.R.A. University, Agra valid with respect to B.Ed. Theory Marks?
- (ii) Are they valid with respect to B.Ed. Practical Marks?
- (iii) Are they valid with respect to B.Ed. Total Marks?

Therefore to provide answers to above questions, a scientific study was needed to examine the performance of B.Ed. student teachers in relation to their B.Ed. selection test scores

The present investigation involved the following major task:

- (i) Collection of marks obtained by the B.Ed. students in the selection test
- (ii) Collection of marks obtained by B.Ed. students in their examination. Theory marks, internal practical marks and external practical marks were collected
- (iii) Analysis of the obtained data

HYPOTHESES :

The following hypotheses was formulated:

Achievement on the B.Ed. selection tests and performance at the B. Ed. examination are significantly correlated.

[A] THE VARIABLES -

i. The independent variable :

The Selection tests achievement was the primary independent variable.

ii. The dependent variable -

Performance at the B.Ed. Examination was the dependent variable for the study.

iii. The Moderator variable :

High Merit $\{>(M + SD)\}$ and low Merit $\{<(M-SD)\}$ were the moderator variables.

iv. The Control variables

In the present study the factor of University, Sex and caste of the student teachers were controlled.

(A) DATA RELATED TO THE SELECTION TEST

The summary statistics calculated from the data of the Selection Test are presented in the following Table:

TABLE – 1
Mean, Median, SD, Sku and Ku of the scores
on the Selection Tests

Group	N	M	Md	SD	Sku $\frac{3(M-Md)}{SD}$	Ku $\frac{2}{P_{90}-P_{10}}$
Whole Sample	675	276.72	272.00	34.553	0.410	0.277

(B) DATA RELATED TO THE B.Ed THEORY MARKS.

TABLE : 2

SUMMARY STATISTICS OF B.Ed. THEORY MARKS.

Group	N	M	Md	SD	Sku	Ku
Whole Sample	675	335.81	340.00	42.383	-0.296	0.257

DISCUSSION:

(C) DATA RELATED TO THE B.Ed. PRACTICAL MARKS

The B.Ed. Practical marks were given in the appendices.

TABLE : 3
SUMMARY STATISTICS OF
B.Ed. PRACTICAL MARKS

Group	N	M	Md	SD	Sku	Ku
Whole Sample	675	152.83	155.00	16.274	-0.401	0.268

(D) DATA RELATED TO THE B.Ed. TOTAL MARKS

SUMMARY STATISTICS OF B.Ed. TOTAL MARKS

Group	N	M	Md	SD	Sku	Ku
Whole Sample	675	488.64	490.00	46.144	-0.089	0.263

ANALYSIS OF COEFFICIENTS OF CORRELATION BETWEEN SCORES ON THE SELECTION TEST AND THE MARKS AT THE B.Ed. EXAMINATION

Tables 4
'r' between B.Ed. Selection Test Scores and B.Ed. examination marks

Variables	N	r	r ²	tr
(i) B.Ed. selection Test Scores and B.Ed. theory marks	675	0.031	0.000961	0.8045
(ii) B.Ed. selection Test Scores and B.Ed. practical marks	675	0.326	0.1062	8.94455*
(ii) B.Ed. selection Test Scores and B.Ed total marks	675	0.141	0.01988	3.6947*

* Significant at the 0.01 level

DISCUSSION :

The above Table 4 presents the validity coefficient of the B.Ed. Selection test with B.Ed. theory. Practical and Total Marks as Criteria. The coefficient of Correlation between the Selection Test Scores and theory Examination Marks is 0.031. It is very low tending towards 0 and is not significant at the 0.05. The selection tests are not valid when reconsider B.Ed. theory marks at the criterion. It's coefficient of determination $r^2 = 0.000961$ indicates that no variance in theory marks can be explained by the B.Ed. selection Tests scores. The coefficient of correlation between the selection tests scores and B.Ed. practical marks is 0.326 which is also significant at the 0.01 level but the coefficient of determination $r^2 = 0.1062$ indicates that only about 10 percent variance of practical marks can be predicted by the scores of the Selection Test Scores. Any how it has low validity.

The coefficient of correlation between selection test scores and the B.Ed. total marks is 0.141. It is significant at 0.01 level. The trend is really positive but the value denotes low correlation present level but slight. Hence selection tests scores and B.Ed. examination total marks are low and positive correlated. They do not go together. Thus the validity of selection test is questionable. It needs total modification. It can be improved if High School, Intermediate and Graduation marks are added with the selection tests marks.

FINDINGS:

A. DESCRIPTION OF THE OBTAINED DISTRIBUTIONS:

- (i) The distribution of the B.Ed. selection test of the selected student teachers (N=675, M=276.72, SD=34.553) was very slightly positively skewed (Sk_u=0.410) and slightly platykurtic (ku=.277). Thus it was almost normal (vide table 1).
- (ii) The distribution of the B.Ed. theory marks of the selected student teachers (N=675, M=335.81, SD=42.383) was slightly negatively skewed (Sk_u=-.296) and slightly leptokurtic (ku=.257). Thus it was almost normal (vide table 2)

- (iii) The distribution of the B.Ed. practical examination marks (N=675, M=152.83, SD=16.274) was slightly negatively skewed (Sku=-.401) and almost mesokurtic (ku=.268). Thus it was almost normal (vide table 3)
- (iv) The distribution of the B.Ed. examination total marks (N=675, M=488.64, SD=46.144) was symmetrical (Sku=-.089) and mesokurtic (ku=.263). Thus it was normal (vide table 4)

CORRELATION OF THE SELECTION TEST WITH THE CRITERIA:

- (i) The coefficient of correlation ($r=.031$) was found between the B.Ed. selection tests score and B.Ed. examination theory marks (N=675). It was not significant at the .05 level. The coefficient of determination $r^2=.000961$ expressed that no variance in B.Ed. examination achievement was due to variation in the scores at the selection test. Gupta (1984) reported $r=.546$ between the selection procedure of 1983 and B.Ed. total marks. It was a different procedure in which no selection test was used.
- (ii) A significant coefficient of correlation between the selection test scores and B.Ed. practical marks was $r=.326$. The coefficient of determination $r^2=.1062$ indicates about 11% variance in practical marks can be predicted by the scores of the selection test scores.
- (iii) A significant coefficient of correlation $r=.141$ (N=675) was found between selection test scores and the B.Ed. total marks. The coefficient of determination $r^2=.01988$ indicates that only about 2% variation in total B.Ed. marks is due to variation in selection test scores.
- (iv) Achievement on the B.Ed. selection test and performance at the B.Ed. examination are significantly correlated
- (v) B.Ed. selection test scores and B.Ed. theory marks are very low correlated and the value is not significant at the .05 level but in the case of B.Ed. practical marks they moderately correlated and value is significant beyond .01 level. Similarly, the B.Ed. total marks with the total of selection test scores are low correlated but significant at the .01 level. The forecasting efficiency values with B.Ed. theory and B.Ed. total marks as criteria is less than 1% separately only in the case of B.Ed. practical marks, the value is 5%. The results are corroborated with the results obtained by Kapoor (1957), Kishor (1964), Saroj (1965), Deva (1966), Sharma (1969), Debnath (1971), Bhushan (1977), Gupta (1984), Goyal (1988) and Singh (1995) but the validity coefficients were inferior to Malhotra (1956), Jayamma (1962), Shah (1962), Pandey (1968), Singh (1970). The reason may be poor quality of B.Ed. selection test.

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Endnotes

ⁱ **Report of the Education Commission (1952-53)**, (New Delhi), Ministry of Education, Govt. of India, 1965), p-126.

ⁱⁱ **Report of the Indian Education Commission (1964-66)** New Delhi : Ministry of Education, Govt. of India, 1966), p, 46.

ⁱⁱⁱ **Report of the Education commission (1952-53)**, Ministry of Education, Govt. of India, 1965)

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