Influences of Age, Qualification and Emotional Intelligence on Teacher Effectiveness at Secondary School Stage

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Abstract- The present study aims at studying the influence of the age, qualification, and emotional intelligence on the teacher effectiveness of the teachers working in Jalandhar and Ludhiana districts of Punjab, India. Using a multi-stage random sampling method, a sample volume of 739 teachers was determined. Two main instruments were used to measure the study variables: a 80-item questionnaire by C R Darolia on emotional intelligence and a 60-item Teacher Effectiveness Scale (TES) by Mutha and Kumar to measure teacher effectiveness. The analysis of results revealed that: (a) teaching effectiveness of teachers and teachers of high and low ages are equally effective; (b) teachers with B.Ed. qualification and without B.Ed. qualification possess similar proficiency level of teaching and, (c) teachers who are highly emotionally intelligent are more effective in teaching than teachers who are less emotionally intelligent.

Index Terms – Teacher Effectiveness, emotional intelligence, age, qualification.

1. INTRODUCTION

It has been rightly said that no people can rise above the level of its teachers. With the increasing focus on the universalization of education, the requirement of teachers has become an important issue. The Indian Education Commission (1966) keeping this in consideration to enjoin education with growth, in its report titled 'Education and National Development' gave importance to the concept. The report says, "In a world based on science and technology, it is education that determines the level of prosperity, welfare and security of the people. On the quality and number of people passing out of our schools and colleges will depend on our success in the great enterprise of national reconstruction whose principle objective is to raise the standard of living of our people".

Education has always been a concern for the nations. Those nations who had not cared for their education system had perished. Education is one of the most popular and powerful device, rather an agency, for bringing the social, cultural and economic changes. A well organized and goal oriented education system is needed to help the learner to realize his

potentialities, capabilities and capacities. A teacher is competent enough to mould the pupil's behavior.

Policymakers across the countries are well aware that the quality of teaching is the most critical school-based factor contributing to student learning. The teachers need appropriate knowledge and skills, personal characteristics, professional prospects and motivation if they are to meet the expectations placed on them (Delors, 1996). It has been noted that as pre-service training alone is not sufficient to create an impact on the teachers, to meet the thrust envisage, more significance must be given to in service training and development programs (NPE, 1968).

Teacher effectiveness has been always a difficult variable to be measured or defined. From the perspective of different stakeholders (teachers, students, and administrators) the term means to them differently. They ordered three most important abilities — cultivate thinking skills, stimulate interest in the subject, and motivate students to learn, but not in the same order.

Teacher effectiveness is determined by a number of factors like certification, students' ratings, experience, teacher preparation programs and degrees, teacher coursework and teacher's own test scores. Today a teacher is seen as a facilitator allowing for idea generation. By animating, leading and counselling, the teacher is a mentor. Guiding, evaluating and collaborating puts the teacher in the role of an information provider. The role of the teacher as a researcher and a learning resource developer cannot be undermined in this age. As a curriculum planner and organizer, a teacher plays an active role in the actualization of the curriculum. These roles are closely related one to another. There are many factors, which influence the effectiveness of the teacher viz. intelligence, attitude towards teaching, experience, academic qualification, personality, mental health etc. (Raghu, 1994). Barr (1952) explains teacher effectiveness as a relationship between teachers, pupils and other persons concerned with the educational undertaking. Dictionary of Education (2005) explains the term teacher effectiveness as the ability of a teacher to create a meeting and an interaction between the physical, intellectual and psychological interests of the students. The ability of a teacher is to relate the learning activities to the developmental process of the learner and to their current and immediate interests and needs.

Education to be meaningful should not only aim at the physical and mental growth of the individual, but also take into account the needs and the aspirations of a developing society. Emotions of teachers are vital in this regard. Negative emotions would affect our normal life and emotional decisions would lack fairness of judgment and affect others. Jha and Singh (2012) revealed that emotional stability, selfmotivation, managing relations, self-awareness and integrity are the best predictors of teacher effectiveness. Hwang (2007) found that the teachers who had superior competencies, comfort, empathy, leadership and selfesteem, tended to perform better in overall teaching effectiveness. Similarly, Sutton & Wheatly (2003) have stated that emotional competence of teachers is necessary, both in general for their own well-being and for effectiveness and quality in carrying out teaching- learning processes in the classroom, and in particular for the socio-emotional development of students.

1.1. Justification

A school may have excellent material resources, equipment, building, library and other facilities along with a curriculum appropriately adopted to suit the community needs, but if the teachers are not effective and dedicated, the whole system is likely to be ineffective and resources will be wasted. Teachers are expected to fill many roles in their daily tasks. These roles may include assessor, planner, curriculum developer, information provider, role model, facilitator, and resource developer. Caruso, Mayer and Salovey (2002) pointed that teaching job is preferred by persons with high emotional intelligence and individuals with High EI can better perceive emotions, use them in thought, understand their meanings, and manage emotions better than others. Teachers high in emotional intelligence tend to be more caring of their students. They can better recognize student needs and they respond to these needs accordingly. Thus, the present study intends to find out the role of emotional intelligence, age and qualification on the effectiveness of the teachers working at secondary stage in the state of Punjab.

1.2. Objectives

The present study is designed to study teacher effectiveness in relation to Emotional Intelligence, age and qualification of teachers working in secondary schools.

1.3. Hypotheses

The following hypotheses have been framed keeping in view the above said objective:

- 1. There is no significant difference in the teacher effectiveness of secondary school teachers in relation to their age.
- 2. There is no significant difference in the teacher effectiveness of secondary school teachers in relation to their qualification.
- 3. There is no significant difference in the teacher effectiveness of secondary school teachers in relation to their emotional intelligence.
- 4. There is no interaction effect of age and qualification; age and emotional intelligence & qualification and emotional intelligence on the scores of Teacher effectiveness of secondary school teachers.
- 5. There is no interaction effect of type of age, qualification and emotional intelligence on the scores of teacher effectiveness of teachers working in secondary schools.

2. METHODOLOGY

2.1. Sample

In the present study, 30 schools comparable in terms of infrastructure, faculty and student strength each were selected randomly from two clusters i.e. Jalandhar and Ludhiana districts of Punjab. Thus, 739 secondary school teachers were selected from two clusters i.e. Jalandhar and Ludhiana districts of Punjab. Emotional intelligence questionnaire was administered to all these secondary school teachers. The scores obtained through emotional intelligence questionnaire were arranged in ascending order. On the scores of emotional intelligence 30% top and 30% bottom school teachers were identified as teachers with low and high emotional intelligence. In the second phase, the selected secondary school teachers were asked to fill Teacher effectiveness scale for further investigation.

2.2. Procedure

The investigator took 2 districts out of 17 districts of Punjab because of the time resources and effort required. More or less the districts are representative of population of Punjab in other districts as the recruitment policies, environment and working conditions and also the cultural background are similar among the sample population. The sample is representative in nature of universe population of teachers working in secondary schools of Punjab. In the present study, 30 schools (15 government and 15 private secondary schools) comparable in terms of infrastructure, faculty and student strength each were selected randomly from two clusters i.e. Jalandhar and Ludhiana districts of Punjab. 20 teachers from each school were selected randomly from the available teachers. Thus, 600 secondary school teachers each were selected from two clusters i.e. Jalandhar and Ludhiana districts of Punjab. Initially, 1200 secondary school teachers comprised the sample of the study. Out of them, 739 (61.58%) secondary school teachers agreed to be part of the

study and completed the exercise for final calculation of data from the two clusters i.e. Jalandhar and Ludhiana districts of Punjab. Out of them, 341(46.14%) are low age teachers i.e. less than 35 years and 398 (53.85%) are high age i.e. more than 35 years respectively. From qualification point of view, 138 (18.67%) are without the B.Ed qualification, 142 (19.22%) are graduates with B.Ed qualification and 459(62.11%) are postgraduates with B.Ed qualification. Emotional intelligence questionnaire was administered to all these secondary school teachers. The scores obtained through emotional intelligence questionnaire were arranged in ascending order. On the scores of emotional intelligence 30% top and 30% bottom school teachers are identified as teachers with low and high emotional intelligence from government and private schools. In the second phase, the selected secondary school teachers were asked to fill Teacher effectiveness scale for further investigation. The collected data was tabulated and subjected to statistical analysis and interpretation as per the hypotheses.

2.3. Tools

The following tools were used for data collection:

- 1. Multidimensional Measures of Emotional Intelligence (MMEI) by C. R Darolia, 2003.
- 2. Teacher Effectiveness Scale (TES) by Kumar and Mutha, 1985.

2.4. Statistical Techniques

The following statistical techniques were employed to analyze the data:

- 1. Means and standard deviations were employed to understand the nature of data on the scores of teacher effectiveness.
- 2. 3 way ANOVA was employed to find significant difference between various sub groups of high and low emotionally intelligent secondary school teachers of different age groups possessing different qualifications.

2.5. Research Design

2x2x3 factorial design was employed on the scores of teacher effectiveness wherein, age, qualification and emotional intelligence were studied as independent variables and were used for the purpose of classification viz. high and low emotional intelligence; high and low age; & without B.Ed, graduates with B.Ed and PG with B.Ed. Teacher Effectiveness was studied as dependent variable.

3. ANALYSIS AND INTERPRETATION

To study the teacher effectiveness of high and low emotionally intelligent secondary school teachers of different age groups and with or without B.Ed qualification in Punjab, the data has been analysed using Univariate analysis of variance. The mean and standard deviation were calculated for teacher effectiveness score and are presented below in table 1.

Table 1

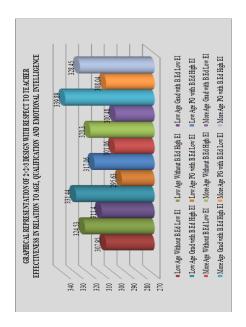
Means And SDs Of Sub-Groups Of Anova For 2×2×3 Design With Respect To Teacher Effectiveness In Relation To Age, Qualification And Emotional Intelligence

A	Q	EI	Mean	SD	N
Low Age	Without B.Ed	Low	307.95	25.6	21
		High	324.53	25.0	19
		Total	315.83	26.3	40
	Grad with B.Ed	Low	311.40	35.9	10
		High	331.44	16.3	9
		Total	320.89	29.5	19
	PG with B.Ed	Low	295.63	38.8	59
		High	317.06	22.5	50
		Total	305.46	33.9	109
	Total	Low	300.26	36.0	90
		High	320.54	22.8	78
		Total	309.67	32.2	168
	Without B.Ed	Low	301.06	21.6	16
		High	320.30	26.3	10
		Total	308.46	24.9	26
	Grad with B.Ed	Low	300.48	32.4	23
More Age		High	339.89	33.4	28
		Total	322.12	38.2	51
	PG with B.Ed	Low	308.04	29.1	57
		High	328.45	24.6	71
		Total	319.36	28.5	128
	Total	Low	305.06	28.8	96
		High	330.64	27.6	109

Table 1

Means And SDs Of Sub-Groups Of Anova For 2×2×3 Design With Respect To Teacher Effectiveness In Relation To Age, Qualification And Emotional Intelligence

A	Q	EI	Mean	SD	N
		Total	318.66	30.9	205
Total	Without B.Ed	Low	304.97	23.9	37
		High	323.07	25.1	29
		Total	312.92	25.8	66
	Grad with B.Ed	Low	307.95	25.6	33
		High	324.53	25.0	37
		Total	315.83	26.3	70
	PG with B.Ed	Low	311.40	35.9	116
		High	331.44	16.3	121
		Total	320.89	29.5	237
	Total	Low	295.63	38.8	186
		High	317.06	22.5	187
		Total	305.46	33.9	373



In order to analyze the variance of Teacher effectiveness of high and low emotionally intelligent secondary school teachers of different age groups and with or without B.Ed qualification, the obtained scores were subjected to ANOVA and the results have been presented in the table 2.

TABLE 2

Summary Of Anova For 2×2×3 Design With Respect To Teacher Effectiveness In Relation To Age, Qualification And Emotional Intelligence

Source	Df	SS	MSS	F
Age	1	167.67	167.67	0.20
Qualification	2	3239.81	1619.91	1.91
EI	1	30245.58	30245.58	35.67**
Age × Qualification	2	4731.62	2365.81	2.79
$Age \times EI$	1	710.54	710.54	0.84
Qualification × EI	2	1141.96	570.98	0.67
Age × Qualification × EI	2	1158.32	579.16	0.68
Error	361	306123.89	847.99	
Total	373	37300000		

*Significant at the 0.05 level of confidence

**Significant at the 0.01 level of confidence

3.1. Main Effects

3.1.1. Age

It has been observed from the table2, that F-ratio for the differences on teacher effectiveness between teachers of high and low age is found to be 0.20, which is found to be not significant even at the 0.05 level of confidence. This indicates that two groups of teachers i.e. high age and low age do not differ significantly on their scores of teacher effectiveness. Thus, the results do not provide sufficient evidence to reject the hypothesis (1), "There is no significant difference between teacher effectiveness of teachers belonging to different age groups".

3.1.2. Qualification

It has been observed from the table2, that F-ratio for the differences in qualification of teachers for teacher

effectiveness is found to be 1.91. The value is not significant at the 0.05 level of confidence. This indicates that three groups of secondary school teachers with different qualifications do not differ significantly on their scores of teacher effectiveness. Thus, the results do not provide sufficient evidence to reject the hypothesis (2), "There is no significant difference between teacher effectiveness of secondary school teachers with different qualifications". The findings are in tune with the findings of Kalita (2012) and Manu and Yellappa (2013).

3.1.3. Emotional Intelligence

It has been observed from the table2, that F-ratio for the differences in emotional intelligence for teacher effectiveness is found to be 35.67. The value is found to be significant at the 0.01 level of confidence. This indicates that two groups of secondary school teachers with high and low emotional intelligence differ significantly on their scores of teacher effectiveness. Thus, the results reject the hypothesis (3), "There is no significant difference between teacher effectiveness of secondary school teachers with high and low emotional intelligence". From the means table 4.26, it is found that secondary school teachers with low emotional intelligence (295.63) has scored lesser on teacher effectiveness than secondary school teachers with high emotional intelligence (317.06). The results are in tune with the studies conducted by Cirarrochi, Chan and Caputi (2000); Sutton and Whitely (2003) and Kauts and Saroj (2010).

3.2. Two Order Interaction

3.2.1. Age \times Qualification

It has been observed from the table2, that F-ratio for the interaction between age and qualification; age and emotional intelligence; & emotional intelligence and qualification of secondary school teachers on teacher effectiveness is found to be 2.79, which is not found significant at the 0.05 level of confidence. This indicates that perception of secondary school teachers do not differ significantly on their scores of teacher effectiveness. Thus, the results do not provide sufficient evidence to reject the hypothesis (4), "There is no interaction effect of age and qualification; age and emotional intelligence; emotional intelligence and qualification on the teacher effectiveness of secondary school teachers".

3.3. Three Order Interaction

3.3.1. Age × Qualification × Emotional Intelligence

It has been observed from the table2, that F-ratio for the interaction between age, emotional intelligence and qualification of secondary school teachers on teacher effectiveness is found to be 0.68. Thus, the calculated values are not significant at the 0.05 level of confidence. This indicates that perception of secondary school teachers on the score of teacher effectiveness as a result of interaction of age,

emotional intelligence and qualification for different sub groups do not differ significantly. Thus, the results do not provide sufficient evidence to reject the hypothesis (5), "There is no interaction effect of age, emotional intelligence and qualification on the teacher effectiveness of secondary school teachers".

4. DISCUSSION

From the present study, it has come to the fore that the age does not affect the teaching effectiveness of teachers and teachers of high and low ages are equally effective. This is contradiction the previous findings which concluded that teacher effectiveness was found to be related to the age of the teachers they were found most effective in the 30-39 years; after that their effectiveness went on diminishing (Gupta, 1988). The reason of this might be lack of training and development programmes for the in-service teachers that are essentially effective for improving teaching effectiveness of the teachers. Secondly, the qualification also does not contribute to effectiveness of secondary school teachers. This indicates that the teachers with B.Ed qualification and without B.Ed qualification possess similar proficiency level of teaching. Similar finding are reported by Kalita (2012); & Manu and Yellappa (2013) who concluded that secondary school teachers with different qualifications are equally competent. But, the emotional intelligence has been found to be a contributor to teaching effectiveness. The teachers who are highly emotionally intelligent are more effective in teaching than teachers who are less emotionally intelligent. Similar to the finding, different studies conducted by Cirarrochi, Chan and Caputi (2000); Sutton and Whitely (2003) and Kauts and Saroj (2010) concluded that emotional intelligence is a key factor in the success in teaching and to become more effective, one needs to be more emotionally intelligent. Thus, emotional intelligence shall be given important weightage during the recruitment of teachers and emotional intelligence training shall be given to teachers who are found to be low in EI. The government shall look into the issues which are responsible for not improving effectiveness of teachers with age.

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71

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