



## A study of teaching effectiveness of female teachers in relation to extraversion-introversion and teaching aptitude

Dr. Nazia Abid Khan

Principal (Education), Sandipani Academy, Achhoti, Durg, Chhattisgarh, India

### Abstract

The present study was conducted to ascertain teaching effectiveness of female teachers in the light of their teaching aptitude and extraversion-introversion personality. In all, this study was carried out on 320 female teachers working in government run primary schools of Raipur district. Hindi version of Eysenck Personality Questionnaire (EPQ) prepared by Jitendra Mohan (1985) was used to assess extraversion while Hindi version of Teaching Aptitude Test Battery prepared by Singh and Sharma (1986) was used to assess teaching aptitude of selected female teachers. Teacher effectiveness was assessed by Teacher Effectiveness scale prepared by Kumar and Mutha (1983). Results showed significant main effect of extraversion and teaching aptitude on teacher effectiveness but interaction effect of these two variables was not observed on teacher effectiveness. It was concluded that extraversion and teaching aptitude alone and not in interaction with each other influence teacher effectiveness in a group of female teachers.

**Keywords:** teacher effectiveness, extraversion, teaching aptitude, female teachers

### Introduction

Effective teachers are those who achieve the goals they set for themselves or have set for them by others (e.g., school administrators, ministries of education). As a consequence, those who study and attempt to improve the effectiveness of teachers must be cognizant of the goals imposed on teachers, the goals that teachers establish for themselves, or both.

Alton-Lee (2003) <sup>[1]</sup> has provided ten clearly defined and research-supported characteristics of quality teaching - a focus on student achievement, pedagogical practices that create caring, inclusive and cohesive, learning communities, effective links between school and the cultural context of the school, quality teaching is responsive to student learning processes, learning opportunities are effective and sufficient, multiple tasks and contexts support learning cycles, curriculum goals are effectively aligned, pedagogy scaffolds feedback on students' task engagement, pedagogy promotes learning orientations, student self-regulation, meta-cognitive strategies and thoughtful student discourse and teachers and students engage constructively in goal oriented assessment.

Cochran-Smith (2003) <sup>[5]</sup> reported that teacher quality and teacher preparation have gained significant attention in modern times. One of the important considerations regarding teacher effectiveness is personality traits since long. A personality trait, a relatively stable characteristic is responsible for behaviour of an individual in certain ways. Effectiveness or effective originated from effectivus which means creative or productive. An effective teacher is able to maximise the potential of a student in terms of academic and other curricular outcomes. In this connection personality dimensions namely openness, conscientiousness, extraversion and neuroticism have been found to be associated with teacher effectiveness but the results are somewhat inconsistent. In this context extraversion as defined by Eysenck's may be a special

one being associated with teacher effectiveness closely. According to Eysenck, highly extrovert recognized as sociable, outgoing, impulsive, optimistic and jolly people, the lower and typifies the highly introvert recognized as quiet, introspective, reserved, reflective, disciplined and well-ordered people.

Aptitude refers to a natural or acquired capacity or ability especially a tendency, capacity or inclination to learn or understand (Webster's Medical Dictionary, 2002). It refers to part of a person's mental equipment which gives him a special fitness for any kind of endeavour. Such an aptitude may be the result of either an innate endowment or of special training or both. The mental and physical qualities giving rise to differences in aptitude are difficult to distinguish. How teachers can be identified as teachers with teacher aptitude? Good teaching looks effortless because a teacher's knowledge and experience are invisible. Teaching is a tricky blend of action, a way of contextualising knowledge. Good teaching is, in fact, complex and challenging, and even the best teachers face difficulties translating formal knowledge into effective practice (Blase, 2006) <sup>[3]</sup>.

As far as relationship of personality with teacher effectiveness is concerned, several researchers such as Walls *et al.*, 2002 <sup>[15]</sup>; Henson *et al.*, 2002 <sup>[9]</sup>; Arif *et al.*, 2012 <sup>[2]</sup>; Goal, 2013 <sup>[8]</sup>; Buela and Joseph (2015) <sup>[4]</sup>; Hussainmiya and Naik, 2015 <sup>[10]</sup> worked on it. The studies shown the relationship of personality with teacher effectiveness but as far as relationship of extraversion with teacher effectiveness is concerned, the results are somewhat contradictory. Teacher effective is a complex issue so researchers have incorporated characteristics such as knowledge, skills, aptitude, personality characteristics, motivation etc. (Mitchell Robinson, Plake, & Knowles, 2001 <sup>[12]</sup>; Walker, 2008 <sup>[14]</sup>; Manu and Yellapa, 2013) <sup>[11]</sup> in their studies on teacher effectiveness. Despite the importance of

extraversion and teaching aptitude on teacher effectiveness, no study yet has been conducted in which these two variables were taken together for their combined effect on teacher effectiveness. To fill this void, present study was planned.

### Objective

The objective of the present study is to assess main and interaction effect of extraversion and teaching aptitude on effectiveness of primary school's female teachers.

### Hypothesis

It was hypothesized that extroverted female teachers with high teaching aptitude would score significantly higher on teacher effectiveness scale than introverted female teachers with low teaching aptitude.

### Methodology

**Sample:** To conduct the study 320 female teachers (Ave. age 32.14 years) were selected from population of female primary school teacher working in government schools situated in Raipur district. Sample was selected with the help of stratified random sampling method.

**Tools:** Hindi version of Eysenck Personality Questionnaire (EPQ) prepared by Jitendra Mohan (1985) used to assess extraversion dimension of personality. This test is based on original EPQ constructed by H.J. Eysenck (1978) and mainly useful to tap E and N dimensions in adults ranging in age from 17 years and above. The overall split-half reliabilities of E, N, P and L scales of EPQ (Hindi version) are 0.69, 0.86, 0.36 and 0.78 respectively. The test-retest overall reliability for scale E is 0.93, for scale N is 0.96, for scale P is 0.85 and for scale L is 0.96 after a one month time gap between test and retest.

A Hindi version of Teaching Aptitude Test Battery (T.A.T.B.) prepared by Singh and Sharma (1986) was used to assess teaching aptitude of selected female teachers. It has 120 items in all, for tapping teaching aptitude of elementary. The areas covered in this test battery are - mental ability, attitude towards children, adaptability, professional information, (5) interest in profession respectively. The scores on total test, were validated against rating of the instructors of teacher training institutions. Product moment correlation was calculated between scores obtained on the test and the positions of trainees given by the instructors. The value of coefficient of correction was found to be 0.421 with a probable error of +0.026.

Teacher effectiveness used as dependent variable was assessed by Teacher effectiveness scale prepared by Kumar and Mutha (1983). It consists of 69 positive worded items which covers area such as academic, professional, social, emotional, moral and personality. The split-half reliability of the scale, applying the Spearman-Brown formula is found to be 0.67 (N=100) with an index of reliability of 0.82. The face validity of the measures is fairly high. The content validity is ensured as the items for which there has been 100 percent agreement amongst judges regarding their relevance to teacher effectiveness are included in the scale.

**Procedure:** To get a final sample of at least 80 cases in each cell of 4 cells of 2x2 factorial design, a stratified random sampling method was used. From initial population of 1200 female teachers of Raipur district, Hindi version of Eysenck's

personality questionnaire prepared by Jitendra Mohan (1985) was administered. After sufficient rest Hindi version of Teaching Aptitude Test Battery (T.A.T.B.) prepared by Singh and Sharma (1986) was administered. Then after, subjects were classified into extrovert-introvert and high-low teaching aptitude groups by using two opposite extreme groups technique with the help of Q3 and Q1, as cutting point. Thus, using stratified random sampling technique, final samples were selected having 80 cases in cell of 4 cells design, making a total of 320 subjects. Finally, identified 320 cases were subjected on teacher effectiveness scale by Kumar and Mutha (1983) to measure their teacher effectiveness. The obtained results are presented in table 1.

**Table 1:** Effect of Extraversion (A) x Teaching Aptitude (B) on Teacher Effectiveness (N=320)

		Teaching Aptitude (B)		Marginal Mean
		High (b <sub>1</sub> )	Low (b <sub>2</sub> )	
Extraversion (A)	Extrovert (a <sub>1</sub> )	N=80 M=308.67 S.D. = 16.41	N=80 M=297.02 S.D.=14.14	302.85
	Introvert (a <sub>2</sub> )	N=80 M=300.07 S.D.=16.88	N=80 M=285.02 S.D.=15.22	292.55
Marginal Mean		304.37	291.02	

**Table 2:** ANOVA Summary

Source of Variation	SS	DF	MS	F
A	8487.200	1	8487.200	34.42**
B	14257.800	1	14257.800	57.82**
AB	231.200	1	231.200	0.93 (NS)
Within treatment(Error)	77915.000	316	246.566	

\*\* Significant at .01 level; NS Not Significant

Table 1 reveals the following facts:

- The main effect of extraversion on teacher effectiveness was found to be statistically significant at .01 level (F=34.42, p<.01). It reveals that extroverted female teachers showed significantly more magnitude of effective teaching (M=302.85) as compared to introverted female teachers (M= 292.55).
- The main effect of teaching aptitude on teacher effectiveness was found to be statistically significant at .01 level (F=57.82, p<.01). It reveals that female teachers with high teaching aptitude showed significantly more magnitude of effective teaching (M=304.37) as compared to female teachers with low teaching aptitude (M= 291.02).
- The F of 0.93, an indicator of interaction effect of extraversion and teaching aptitude on teacher effectiveness in a group of female teachers was not found to be statistically significant. It shows that extraversion and teaching aptitude were jointly incapable of generating variance upon teacher effectiveness in a group of female teachers.

### Discussion

The results reveal that extroverted Ss are found to be significantly better in teacher effectiveness than the

introverted Ss. As Eysenck (1982) <sup>[6]</sup> has very clearly indicated that extraverts have lower level of cortical arousal and they tend to seek out stimulation where as introverts are over aroused and are highly sensitive to the incoming stimulation. This is because of the function of cortical arousal level as governed by reticular formation. This excitement enhance the performance of extroverts where as it interferes the performance of introverts (Wilson, 1978) <sup>[16]</sup>. Because of the over arousal level, introverts are much excited. This is the major reason that can be attributed to the poor level of teacher effectiveness in Introverts as compared to their counterparts, i.e. extrovert teachers. For being an effective teacher one must possess good mental ability. If a teacher has good mental ability he/she can understand the problems of students, can explain the subject before the students in a logical manner, can perceive the problem of students genuinely. Apart from the academic matter he/she can manage the classroom effectively whereas the teachers who are low on mental ability disclose lack in these characteristics. As dimensions of teaching aptitude professional information and interest in profession has laid also a significant role in making a teacher effective in their teaching. Those teachers who scored high on Teacher effectiveness scale have also scored high on teaching aptitude scale. Professional information and Interest in profession are two of the major components of teaching aptitude. so, it shows that a successful teacher are well aware about their profession and are involved in seeking professional information so that they can excel in their performance. Similarly, such teachers are involved teachers and showed sufficient interest in their profession. Professional Information seeking and Interest in profession are attitudinal variables which are very necessary for making a teacher effective.

Results reveal that both extraversion and teaching aptitude are potentially enough to generate variance independently upon dependent variable rather than being jointly with any other independent variable. This may be attributed to the independence of each of the two factors for interaction.

### Conclusion

On the basis of results and associated discussion it may be concluded that extraversion and teaching aptitude alone but not in interaction with each other able to influence teacher effectiveness in a group of female school teachers.

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