



Differential effect of socio-demographics on emotional competence of training college teachers of Kerala

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Abstract

The study aims to find out the differential effect of socio-demographic factors like gender, age, educational qualification, and type of management of the institution on emotional competence of training college teachers of Kerala. The descriptive study utilized data collected from a stratified random sample of 238 teacher educators from various teacher education colleges affiliated to four universities in Kerala. Four null hypotheses were tested for the study. The data were collected by administering the Emotional Competency Scale for Teacher Educators (Geetha & Amutha Sree, 2023) having acceptable validity and reliability. Data analysis was accomplished with the help of SPSS. The analysis brought out that gender and age of the training college teachers exert significant differential effect on their metacognition. Whereas, neither holding a research degree nor the type of management of the college have significant differential influence on the emotional competence of training college teachers. The female teachers were found to outshine the male teachers in their emotional competence. Likewise, teachers in the 31-45 years age group were found to excel their colleagues in the <30 years age group and >46 years age group in their emotional competence.

Keywords: Emotional competence, socio-demographic factors, differential effect

Introduction

The task of teachers tends to become increasingly intricate over time. Teaching is considered one of the most emotionally demanding professions, which can affect mental health and wellbeing of both the teacher and learners (Schonert-Reichl, 2017^[11]; Weissberg, Durlak, Domitrovich & Gullotta, 2015)^[16]. Students' cognitive, social, and affective-motivational growth depends on the quality of the social interactions between teachers and students (Aldrup, Carstensen, Koller & Klusmann, 2020)^[1]. Teachers, however, frequently feel negative emotions and find it difficult to build positive connections with students when they break the rules, are boisterous and disrupt lessons, are not interested, or are not focused (Nurmi & Kiuru, 2015)^[10]. In due course, teachers' failure to effectively interact and build connections with learners are associated with deteriorated professional efficacy and decreased occupational well-being (Dicke, Elling, Schmeck & Leutner, 2015)^[5]. Additionally, it has been discovered that emotionally fatigued teachers are less sensitive and offer less emotional support to their pupils, who in turn exhibit reduced motivation and accomplishment in their classrooms (Koenen, Vervoort, Kelchtermans, Verschuere & Spilt, 2018^[7]; Arens & Morin, 2016)^[2]. That is, therefore, critical for both students' achievement and teachers' professional wellbeing to identify teacher traits that help them manage their own emotions and foster healthy teacher-student relationship, especially during difficult social encounters with students.

In addition to abide by the requirements of the routine classroom works, teachers' perceptions, values and emotions also influence their success in teaching (Van Kan, Ponte & Verloop, 2013)^[14]. In fact, teaching requires more than just imparting knowledge; it also entails developing

connections with students, which calls for emotional investment on the parts of both parties (Madalinska-Michalak, 2015^[8]; Bahia, Freire, Amaral & Estrela, 2013)^[4]. When considering what constitutes an effective and knowledgeable teacher, one must take into account both their professional qualifications and their personality traits. Arnon and Reichel (2007)^[3] consider an ideal teacher as one with academic knowledge, a social mission, a focus on individual development, and a personality that is at the centre of their teaching. Among the different personality factors that make an ideal teacher, their emotional competence is perhaps the most important (Vesely, Saklofske & Leschied, 2013)^[15]. Studies on teachers' social and emotional competence have revealed that it is one of the critical factors in maintaining their emotional autonomy and mental health by abating stress and burnout (Torres-Hernández, 2018^[13]; Marques, Marques-Pinto & Alvarez, 2016)^[9]. Review of recent literature in the area reveals that any sensible interpretation of the research findings emerged from teachers' emotional competence to optimize their professional effectiveness requires knowledge on socio-demographic factors that exert influence on emotional competence of teachers. In this context, this study is a modest attempt to examine the differential effect of few demographic factors on the emotional competence of training college teachers of Kerala.

Objective

The objective of the study is to find out the differential effect of demographic factors like sex, age, educational qualification, and type of management of the institution on the emotional competency of training college teachers of Kerala.

Hypotheses

The following null hypotheses were tested for the study:

1. Gender has no significant differential effect on emotional competency of training college teachers.
2. Age has no significant differential effect on emotional competency of training college teachers.
3. Educational qualification has no significant differential effect on emotional competency of training college teachers.
4. Type of management of the college has no significant differential effect on emotional competency of training college teachers.

Methodology

Normative Survey method was adopted for the present study. Teacher educators working in Training Colleges (Teacher Education Colleges) affiliated to different universities in the state of Kerala (India) constitute the population of the study. The investigation made use of a stratified random sample of 238 teacher educators. The stratification criteria included affiliated university and type of management of the college. Accordingly, teachers from training colleges affiliated to all the four universities (University of Kerala, Mahatma Gandhi University, University of Calicut and Kannur University) which offer Teacher Education Programmes in the State was drawn for the study. Further representation was also given to the type of management of the colleges, viz, Government, Aided and Unaided colleges. The emotional competency of the sample was measured by administering the Emotional Competency Scale for Teacher Educators (ECSTE) developed by the investigators. It is a 75-item five-point Likert type rating scale which compresses two sub-tests, one for appraising the

Personal Competence and the other for assessing the Social Competence. The Personal Competence sub-test consists of 36 items covering 12 domains viz., (i) Emotional awareness, (ii) Accurate self-assessment, (iii) Self-confidence, (iv) Self-control, (v) Trustworthiness, (vi) Conscientiousness, (vii) Innovation, (viii) Adaptability, (ix) Achievement drive, (x) Commitment, (xi) Initiative, and (xii) Optimism. The Social competence sub-test consists of 39 items covering 13 domains, viz., (i) Understanding others, (ii) Service orientation, (iii) Political awareness, (iv) Developing others, (v) Leveraging diversity, (vi) Influence, (vii) Communication, (viii) leadership, (ix) Change catalyst, (x) Conflict management, (xi) Building bonds, (xii) Collaboration, and (xiii) Team capabilities. The ECSTE has a concurrent validity of 0.73 with the Emotional Competence Scale (Sharma & Bharadwaj, 2009) [12], and test-retest reliability of 0.88. A general Data Sheet was attached with the ECSTEC for collecting demographic information needed for the study. The instruments were administered on the sample under standardized conditions, scored, consolidated the data thus obtained were subjected to appropriate statistical treatment with SPSS and interpreted accordingly.

Analysis and Interpretation

The data pertaining to emotional competency were analyzed descriptively and inferentially to test the hypotheses. The Arithmetic Mean (M), Median (Mdn), Standard Deviation (σ), Skewness (Sk), Kurtosis (Ku), and Standard error of Mean (SE_M), calculated from the TCSTE scores for the total sample and sub-samples based on sex, age, educational qualification, and type of management of the college are presented in Table 1.

Table 1: Statistical Indices Pertaining to Emotional Competence of Training College Teachers

Groups	Sample	N	Range	M	Mdn	σ	Sk	Ku	SE_M
Whole	Total	238	89	199.23	201.0	19.99	-0.099	-0.582	1.30
Sex	Male	72	89	194.72	193.5	19.40	0.043	-0.234	2.29
	Female	166	84	201.18	202.0	19.99	-0.175	-0.642	1.55
Qualification	Ph. D. holders	66	81	201.92	202.0	18.34	-0.433	0.093	2.26
	Non-Ph. D.	172	87	198.19	199.5	20.56	0.019	-0.693	1.57
Age	<30 Years	68	82	196.93	200.0	19.58	-0.062	-0.384	2.37
	31-45 years	96	84	203.35	204.5	20.39	-0.487	-0.187	2.08
	>46 years	74	76	195.99	192.5	19.17	0.348	-0.614	2.23
Institution	Govt.	30	84	197.33	199.0	22.59	-0.121	-0.417	4.12
	Aided	52	79	197.15	202.0	19.86	-0.275	-0.661	2.75
	Unaided	156	84	200.28	202.0	19.57	-0.018	-0.648	1.57

The data and result of the descriptive statistical analyses shows that training college teachers of Kerala is a heterogeneous group with respect to their emotional competence. The range of the distribution of emotional competence for the total sample is 89 with the highest score of 242 and lowest score of 153. The distribution has an arithmetic mean of 199.23 and a standard deviation of 19.99. The standard error of mean (SE_M) estimated for the

Total sample is 1.30. The distribution of emotional competence scores in the total sample as well as in all the sub-samples are normal as the values of skewness estimated for different distributions lie between $-1/2$ and $+1/2$.

1. Differential effect of gender on emotional competence

The data and result of the independent sample t-test performed to compare male and female teachers with respect to their emotional competence are given in Table 2.

Table 2: Comparison of the Emotional Competence of Male and Female Teachers

Groups	Statistical Indices				t-value	Level of Significance
	N	M	SD	SE_M		
Male	72	194.72	19.399	2.286	2.310	.05
Female	166	201.18	19.995	1.552		

The t-ratio estimated on comparing the male and female teachers with respect to their emotional competence is significant at 95% confidence interval ($t = 2.310$; $p < .05$). It reveals the presence of a true gender difference in emotional competence of training college teachers. Inspection of the mean scores obtained for the groups reveals that female teacher educators excel their male counterparts in their emotional competence.

2. Differential effect of age on emotional competence

The teachers were divided into three groups based on their age, viz., teachers with below 30 years of age (<30 years), between 31 years and 45 years (31-45 years), and teachers above 46 years (>46 years). The differential effect of age on the emotional competence of training college teachers were found out by employing one-way ANOVA. The summary of the analyses carried out in this context is presented in Table 3.

Table 3: Comparison of the Emotional Competence of Training College Teachers in different Age Groups (Summary of ANOVA)

EC	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	13090.764	2	6545.382	18.830	.000
Within Groups	81686.984	235	347.604		
Total	94777.748	237			

The F-ratio obtained on comparing the emotional competence of training college teachers in different age groups is significant ($F = 18.830$; $p < .001$). It exposes that age is a significant factor that discriminate training college teachers on the basis of their emotional competence. The

significant F-ratio subsequently led to the post-hoc test to find out the age-groups which differ regarding the emotional competence. The data and result of the Scheffe's post-hoc test performed in this context is given in Table 4.

Table 4: Post Hoc Tests for Comparison of Emotional Competence of Training College Teachers in different Age Groups

(I) EC	(J) EC	(I-J) Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<30 Years	31-45 Years	-15.714*	2.955	.000	-22.99	-8.43
	>46 Years	-1.202	3.132	.929	-8.92	6.51
31-45 Years	<30 Years	15.714*	2.955	.000	8.43	22.99
	>46 Years	14.513*	2.884	.000	7.41	21.62
>46 Years	<30 Years	1.202	3.132	.929	-6.51	8.92
	31-45 Years	-14.513*	2.884	.000	-21.62	-7.41

* The mean difference is significant at the 0.05 level.

The mean difference obtained on comparing the emotional competence of teachers in <30 years age group and 31-45 years age group (mean difference = 15.741; $p < .001$) as well as that estimated on 31-45 years age group and >46 years age group (mean difference = 14.513; $p < .001$) are significant. The results further reveal that teachers in the 31-45 years age group excel their counterparts in the <30 years age group and >46 years age group with respect to their emotional competence. No true difference, however, was

found to exist between teachers in <30 years age group and >46 years age group regarding their emotional competence.

3. Differential effect of educational qualification on emotional competence

The mean ECSTE scores for training college teachers with Ph.D and without Ph.D were compared by employing independent sample t-test. Table 5 presents the data and result of the analysis performed in this context.

Table 5: Comparison of the Emotional Competence of Teachers with Ph.D and without Ph.D.

Groups	Statistical Indices				t-value	Sig
	N	M	SD	SE _M		
With Ph. D	66	201.92	18.336	2.257	1.291	NS
Without Ph.D	172	198.19	20.557	1.567		

The t-ratio estimated on comparing training college teachers who have Ph.D degree and who do not have Ph.D degree is not large enough to be significant at least at 95% confidence interval ($t = 1.291$; $p > .05$). It discloses that educational qualification is not a significant factor that discriminate training college teachers on the basis of their emotional

4. Differential effect of type of management of the college on emotional competence

The emotional competence of training college teachers from government, aided and unaided colleges were compared by applying one way ANOVA to find out significant difference among the groups. The summary of the analyses carried out in this context is presented in Table 6.

Table 6: Comparison of the Emotional Competence of Teachers from Government, Aided and Unaided Training Colleges (Summary of ANOVA)

EC	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	504.722	2	252.361	.629	NS
Within Groups	94273.026	235	401.162		
Total	94777.748	237			

The F-ratio obtained on comparing the emotional competence of training college teachers from government, aided and unaided colleges is not significant ($F = 0.629$; $p > .05$). To put differently, type of management of the college is not a significant factor in discriminating training college teachers on the basis of their emotional competence.

Conclusions

The results of the analyses showed that demographic factors like sex and age are significant factors that exert significant differential effect on emotional competence of training college teachers of Kerala. However, educational qualification and type of management of the college have no significant differential influence on the emotional competence of teacher educators. Female teachers surpass the male teachers in their emotional competence. Comparatively younger teachers (<30 years age group) and older teachers (>46 years age group) trail behind middle aged teachers (31-45 years age group) in their emotional competence. In the light of the statistical analysis performed, the hypotheses 1 and 2 were rejected while hypotheses 3 and 4 were retained.

Acknowledgements

This paper is a part of the Ph. D. research by the first author under the supervision of the second author. The authors place on record their profound and sincere gratitude to the Professor & Head, Dept. of Education, Annamalai University, Tamil Nadu-608002, for the administrative academic support extended during the study; and also to the Principals and Teachers of various Teacher Education Colleges of Kerala for their generous support and cooperation during the data collection phase of the investigation.

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