

MENTAL HEALTH AS A PREDICTOR OF EMOTIONAL COMPETENCE OF PROSPECTIVE TEACHERS OF SCIENCE IN HIMACHAL PRADESH

Kartar SinghThakur and SanjeevKumar

This paper reports on mental health as a predictor of emotional competence of prospective teachers of science. The present investigation is descriptive in nature. The study was carried on 120 prospective teachers of science from four districts of Himachal Pradesh. The investigator used Scale of Emotional Competence (SEC) developed by Sharma and Bhardwaj (1998) to measure emotional competence while Mental Health Inventory developed by Jagdish and Srivastava (1996) was used to study the mental health of prospective teachers of science. The findings of the study revealed that prospective teachers of science belonging to general and reserved categories were significantly different in their emotional competence. No significant difference was found in the emotional competence of high and low mentally healthy prospective teachers of science. The study also reported that no significant interactional effects were found between the variables. The researchers have suggested the means to improve the mental health and emotional competence of the prospective teachers of science.

KEYWORDS: Mental Health, Emotional Competence, Prospective Teachers, Science, Social Category

INTRODUCTION

Education is the main tool in the hands of man through which he enables

Kartar Singh Thakur ✉

Professor, Department of Education, ICDEOL, Himachal Pradesh University, Shimla
Email: doctorksthakur@gmail.com

Sanjeev Kumar

TGT Non Medical, GSSS Kufthu, Distt. Solan H.P., India
Email: drsanjeevkumatrindia@yahoo.in

himself to meet the various challenges of the life. It is a unique feature of human society that enables the human beings, not only to distinguish between the civilized and uncivilized, but also help them to achieve what otherwise remains unachieved. Teacher is the main source behind the education of each individual. It is the teacher with sufficient degree of mental health and emotional competence who can maintain the twin requisites of teaching-learning situations, healthy interactions in the classroom and healthy participation by students in lessons. The concept of emotional competence is rooted in the understanding of emotions as being normal, useful aspects of being human. According to Sharma (1994), "Emotional competence refers to a person's ability to express or release his/her inner feelings and emotions. It implies an ease around others and determines our ability to effectively and successfully lead and express."

Ellis (1987) defines "emotional competence as the ability to understand, manage and express the emotional aspect of one's life in ways that enable the successful management of life tasks such as learning, forming relationships, solving everyday problems and adopting to the complex demands of growth and development". Emotional competence can lead to improved health through avoiding stress that would otherwise result from suppressing emotions. Emotional competence is the ability to understand, manage and express the emotional aspect of one's life in ways that enable the successful management of life tasks such as learning, forming relationships, solving everyday problems and adopting to the complex demands of growth and development. It is efficiency acquired by the individual to deal with emotional situations effectively. It plays a vital role in the manifestation of human behaviour by which one attempts to deal with different emotive situations and meets his needs including the efforts to maintain harmonious relationships with the environment. A teacher can perform his real job only when he/she is mentally sound and emotionally stable.

Mental health refers to the full and harmonious functioning of our total personality as well as to our bio-socio-psychological and spiritual well being (Dandapani, 2000). It is related to the prevention of mental disorders, and the treatment and rehabilitation of people affected by mental disorders. Mental health is a term used to describe how well the individual is adjusted to the demands and opportunities of life. The World Health Organization defines mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (The World Health Report, 2001). Mental wellness is generally viewed as a positive attribute, such that a person can reach enhanced levels of mental health, even if the person does not have any diagnosed mental health condition. This definition of mental health highlights emotional well being, the

capacity to live a full and creative life, and the flexibility to deal with life's inevitable challenges (en.wikipedia.org). Coleman (1970) defined mental health as “the ability to balance feelings, desires ambitions and ideas in one's daily livings and to face and accept the realities of life. It is the habit of work and attitude towards people and things that brings maximum satisfaction and happiness to the individuals”. In the book entitled 'Mental Hygiene in Public Health', Lewkan (2006) has written that a mentally healthy individual is one who is himself satisfied, lives peacefully with his neighbours, makes healthy citizens of his children and even after performing these fundamental duties has enough energy left to do something for the benefit of society. Emotional mental disorders are a leading cause of disabilities worldwide. Investigating the degree and severity of untreated emotional mental disorders throughout the world is a top priority of the World Mental Health (WMH) survey initiative, which was created in 1998 by the World Health Organization (WHO) (Thorncroft, 2007).

REVIEW OF RELATED LITERATURE

The researcher revisited the related literature in order to find the gap and relationship in studies in the interested field. Bansibihari and Surwade (2006) studied the effect of emotional maturity on teacher effectiveness of different secondary schools of Nandurba and Dhule District of Maharashtra. The results indicated that female teachers are emotionally more mature than male teachers. Emotionally mature teachers are more effective in their teaching than emotionally immature teachers. Neelakandan (2007) studied the understanding of the emotional competence of school teachers of Cuddalore district of Tamil Nadu. From his study the researcher found that the primary school teachers have average level of emotional competence. The teachers having higher qualification were found to have better emotional competence than teachers having essential qualifications only. Further, the results reveal that there is no significant difference between the teachers of government schools and private schools in respect of their level of emotional competence. Patricia and Mark (2008) studied classroom teachers, social and emotional competence in relation to students and classroom outcomes. The researchers proposed a model of the pro-social classroom that highlights the importance of teachers' social and emotional competence and well-being in the development and maintenance of supportive teacher-student relationships, effective classroom management, and successful social and emotional learning program implementation.

The review of studies conducted in India and abroad revealed that most of the investigations are carried out on the emotional competence of students and teachers belong to different areas. The emotional competence of teachers of Primary, Secondary and Higher education level have mainly been highlighted

in these studies, but no study was found on mental health as a predictor of emotional competence. It is necessary to investigate the emotional competence of the teacher-trainees, i.e. prospective teachers. Therefore, effort has been made by the investigators to conduct a study on mental health as a predictor of emotional competence of the prospective teachers of science.

NEED AND SIGNIFICANCE OF STUDY

In the present time, it has been felt and seen that the teacher of the 21st century is not mentally sound and emotionally stable. Being mentally and emotionally healthy does not exclude the experiences of life which we cannot control. As humans we are going to face emotions and events that are a part of life. According to Smith and Segal (2011), "People who are emotionally and mentally healthy have the tools for coping with difficult situations and maintaining a positive outlook which also remain focused, flexible, and creative in bad times as well as good". In order to improve the emotional mental health the root of the issue has to be resolved. "Prevention emphasizes the avoidance of risk factors; promoting aims to enhance an individual's ability to achieve a positive sense of self-esteem, mastery, well-being, and social inclusion" (Power, 2010). It is very important to improve your emotional mental health by surrounding yourself with positive relationships. Another way to improve your emotional mental health is participating in activities that can allow you to relax and take time for yourself. Yoga is a great example and its meditating aspect calms your entire body and nerves. According to a study on well-being Richards, Campania and Muse-Burke found, "mindfulness is considered to be a purposeful state, it may be that those who practice it believe in its importance and value being mindful, so that valuing of self-care activities may influence the intentional component of mindfulness" Richards et.al (2010).

There are many factors that are affecting teachers' mental health and emotionality. Job security, facilities, incentives, exploitation, lack of positive attitude, decision making, and working with associated members, unemployment and cultural variations are such factors which are responsible for teachers' poor mental health and instability in the emotions. That is why; taking into consideration these factors, the present study is an effort to study the mental health and emotional competence of prospective teachers before entering into teaching profession. In case of poor / average mental health and emotional competence the investigator will try to suggest the means and measures to promote positive mental health and achieve emotionally stability.

OBJECTIVES OF THE STUDY

The objectives of the study are:

1. To study and compare emotional competence of prospective teachers of

science with respect to: a) Social Category b) Gender and c) Mental Health.

2. To study and compare the interaction effects of emotional competence of prospective teachers of science with respect to: a) Social Category b) Gender and c) Mental Health.

HYPOTHESES

1. Emotional competence of prospective teachers of science do not differ significantly with respect to a) Social Category b) Gender and c) Mental Health
2. There is no significant interaction in the emotional competence of prospective teachers of science with respect to a) Social Category and Gender b) Gender and Mental Health c) Social Category and Mental Health and d) Social Category, Gender and Mental Health.

METHODOLOGY

To conduct this study, the researcher used 'survey method' of research. Descriptive research studies are designed to obtain pertinent and precise information concerning the current status of any phenomena (Garrett, 2006). They collect and provide the type of information of what exists with respect of variables or conditions in a situation. Descriptive studies may be classified in several ways. Survey is one of the important types of descriptive studies. Survey studies are conducted to collect detailed descriptions of existing phenomena with the intent of employing data to justify current conditions and practices or to make more intelligent plans for improving them. The survey is said to be more realistic than the experiment, in that it investigates phenomena in their natural setting. The researchers preferred and used the method keeping in view the objectives and nature of the study.

SAMPLE

The present study was carried on 120 prospective teachers of science from four districts of Himachal Pradesh i.e. ttery method. Three colleges of education were selected from each district conveniently and total 12 colleges of education were taken for collecting the required sample. Then, 10 prospective teachers of science per college were selected by systematic random sampling method. The researchers categorized the selected sample according to gender (male and female) and social category (general and reserved). Shimla, Hamirpur, Una and Mandi. The researchers selected the districts by lo 60 prospective teachers each from general and reserved categories were selected. Out of which 30 were male and 30 female of each category. The prospective teachers belonging to

Schedule Caste, Schedule Tribe and Other Backward Classes were selected under reserved category and others were taken as general.

TOOLS USED

The investigator used Scale of Emotional Competence (SEC) developed by Sharma and Bhardwaj (1998) to measure emotional competence of prospective teachers of science. The scale has 30 items to measure five emotional competencies where each competency was measured by six items selected for the purpose. The reliability of total emotional competence was 0.76 that was determined by split-half method. The validity of this scale has been determined with factor A and C of 16-personality factor questionnaire and found to be 0.64 and 0.69 respectively. A description of the scale is given in Table 1.

Table 1

Item Wise Description of the Scale of Emotional Competence (SEC).

Sr. No.	Name of the Item	Item number in SEC
1.	Adequate Depth of Feeling (ADF)	1, 6, 11, 16, 21 and 26.
2.	Adequate Expression and Control of Emotions (AECE)	2, 7, 12, 17, 22 and 27.
3.	Ability to Function with Emotions (AFE)	3, 8, 13, 18, 23 and 28.
4.	Ability to Cope with Problem Emotions (ACPE)	4, 9, 14, 19, 24 and 29.
5.	Encouragement of Positive Emotions (EPE)	5, 10, 15, 20, 25 and 30.

Mental Health Inventory developed by Jagdish and Srivastava (1996) was also used by the investigator to study mental health of prospective teachers of science. The inventory consists of 56 items including 32 false-keyed (negative) [* marked] and 24 true-keyed (positive) statements. The reliability coefficients of different dimensions of MHI were found to be more than 0.70 that was determined by split-half method using odd-even procedure. The reliability coefficient of overall mental health was 0.73. The construct validity of inventory was found to be 0.54. The item wise description of the tool is given in Table 2.

Table 2

Item Wise Description of Mental Health Inventory (MHI).

Sr. No.	Name of the Item	Item Numbers in MHI
1.	Positive Self Evaluation (PSE)	1*, 7*, 13*, 19, 23*, 27, 32, 38, 45, 51
2.	Perception of Reality (PR)	6, 8, 14*, 24*, 35*, 41, 46*, 52
3.	Integration of Personality (IP)	2*, 9*, 15*, 18*, 20, 25*, 28*, 33*, 36*, 40*, 47*, 53*
4.	Autonomy (AUTNY)	3*, 10*, 29, 42*, 48*, 54
5.	Group Oriented Attitude (GOA)	4, 11*, 16*, 21*, 26, 30*, 39, 43, 49*, 55*
6.	Environmental Competence (EC)	5*, 12, 17*, 22*, 31, 34, 37, 44, 50, 56

PROCEDURE

The investigators administered both the tools to all concerned prospective teachers personally after establishing perfect rapport with them and asked them to respond correctly and confidently. The item – wise scores were calculated and five items of SEC were added to obtain total emotional competence scores and six items of MHI were added to obtain overall mental health scores which were used by the researchers for analysis.

RESULTS OF THE STUDY

The total scores of emotional competence and mental health of all prospective teachers of science were obtained from scoring of the tools. The researchers used the overall scores (grand total of all five items of EC scale and grand total of six items of MHI) in this study. 'F' test was used to find out the significance of difference between the specified groups. The group-wise grand total scores of emotional competence of the prospective teachers of science are given in the Table 3, 4 and 5.

Table 3
Type of Social Category and Gender Wise Scores of Total Emotional Competence of Prospective Teachers of Science.

<div>Type of Social Category</div> <div>Type of Gender</div>	General	Reserved	Total
Male	8478	8036	16514
Female	8259	7904	16163
Total	16737	15940	32677

It is clear from Table 3 that total emotional competence score of male prospective teachers belonging to general category is highest (score=8478) whereas female prospective teachers of reserved category have the lowest emotional competence score (7904). Male prospective teachers were found more emotionally competent (score=16514) than their counterpart (score=16163). It is found that general prospective teachers have more emotional competence score (score=16737) than prospective teachers belonging to reserved category (score=15940).

Table 4

Type of Gender and Mental Health Wise Scores of Overall Mental Health of Prospective Teachers of Science.

Type of Gender Type of MH	Male	Female	Total
High	8185	8108	16293
Low	8329	8055	16384
Total	16514	16163	32677

The scores lying above mean \pm S. D. were taken as high mental health and scores lying below mean $\pm \frac{1}{2}$ S. D. were taken as low mental health. From Table 4 it is clear that emotional competence of male prospective teachers having low mental health score is highest (score=8329) whereas female prospective teachers of low mental health score have lowest emotional competence score (8055).

Table 5

Type of Social Category and Mental Health Wise Scores of Emotional Competence of Prospective Teachers of Science.

Type of Social Category Type of MH	General	Reserved	Total
High	8324	7969	16293
Low	8413	7971	16384
Total	16737	15940	32677

Results in Table 5 show that prospective teachers of general category having low mental health score exhibit highest emotional competence score (8413) whereas prospective teachers of reserved category pertaining high mental health score have lowest emotional competence score (7969).

In order to study the main effects of type of Social Category, Gender and Overall Mental Health on the total emotional competence scores of sampled prospective teachers of science, statistical technique of 'Analysis of Variance' ($2 \times 2 \times 2$, factorial design involving two types of social categories i.e., general and reserved, two levels of gender i.e., male and female and two levels of mental health i.e., high and low) was applied on the scores of emotional competence.

Table 6
Summary Table of Analysis of Variance on Total Emotional Competence Scores of Prospective Teachers of Science.

Source of Variation	Sum of Squares	df	Mean Square	'F' Value
Social Category	5293.41	1	5293.41	34.49**
Gender	1026.67	1	1026.67	6.69*
Mental Health	69.01	1	69.01	0.45
S/ Category × Gender	63.08	1	63.08	0.41
Gender × Mental Health	323.41	1	323.41	2.11
S/Category × Mental Health	63.07	1	63.07	0.41
S/Category × Gender × Mental Health	4.41	1	4.41	0.03
Error Variance	17188.53	112	153.47	---
Total	24031.59	119	-----	---

From Table 6, it is clear that the calculated value of 'F' ratio for the main effect of social category of prospective teachers of science on their emotional competence came out to be 34.49 for df 1 and 119, which is significantly higher than the 'F' table value 6.84 at 0.01 level of significance. Hence, Hypothesis 1 that emotional competence of prospective teachers of science does not differ significantly with respect to social category was rejected.

Further, Table 6 also reveals that 'F' ratio for main effect of gender came out to be 6.69 for df 1 and 119 which was found significantly higher than the table value 3.92 at 0.05 level of significance. Hence, Hypothesis 2 that emotional competence of prospective teachers of science does not differ significantly with respect to gender was rejected. It is clear from Table no 6 that 'F' ratio for the main effect of mental health has come out to be 0.45, which is not significant at 0.05 level of significance. Also, the calculated value of 'F' ratio for interaction effect of type of social category × gender, type of gender × mental health, type of social category × mental health and type of social category × gender × mental health of prospective teachers of science came out to be 0.41, 2.11, 0.41 and 0.03 respectively for df 1 and 119, which were found to be not significant at 0.05 level of significance. Thus, the interaction effect was found to be not significant even at lowest level of confidence.

The findings of the study reveal that prospective teachers of science belonging to general and reserved categories were found to be significantly different in their emotional competence. The total score obtained by prospective teachers of general category was higher than their counterparts. The poor score of emotional competence of prospective teachers belonging to

reserved category indicates their weakness in five components of emotional competence – adequate depth of feelings, adequate expression and control of emotions, ability to function with emotions, ability to cope with problem emotions and encouragement of positive emotions. Male and female prospective teachers of science are found significantly different in their emotional competence. Male prospective teachers of science are found more emotionally competent than their counterpart. It shows that males are more emotionally sound than females. The results of the study further revealed that there is no significant difference in the emotional competence of high and low mentally healthy prospective teachers of science. It shows that mental health does not affect the emotional competence of prospective teachers of science. They are able to emotionally adjust themselves in the teaching-learning situations. It may be concluded from the study that there are no significant interactional effects found between respective variables.

CONCLUSION

Nowadays, the teaching profession is quite challenging. The teacher has to impart the knowledge to the students according to the current standards, which are pretty high. Thus, the teacher should be mentally healthy and emotionally stable. To promote the emotional competence of prospective teachers to the highest level, some suitable steps should be taken which may help in over-all development of the prospective teachers. Also some reforms in the B.Ed. curriculum may be made in order to make the prospective teachers more competent and efficient in the teaching-learning process. They may be given chance to interact with each other through workshops and exhibitions which should be organized accordingly. It may help in developing responsibility and capacity for adjustment in all types of emotional situations. All the five competencies of emotional competence should be developed in them through guest lectures of the expert psychologists that should be organised by the concerned college authorities. Also, the need and importance of the concept of emotional competence should be explained by the teacher educators in the regular classes of the training programme. There should be provision in the B.Ed. program for emotional training of the prospective teachers so that they can react in the real classroom situations. This may help teachers, administrators, educational planners and concerned authorities for making the teaching-learning process more effective.

REFERENCES

- Bansibihari, P., & Surwade, L. (2006). *Effect of Emotional Maturity on the Effectiveness of Teacher*. Edutracks, Neelkamal Publication Private Limited Hyderabad, 6(1), 37-38.

- Coleman, J. C. (1970). *Abnormal Psychology and Modern Life*. Taraporevala Sons & Co. Pvt. Ltd. Bombay.
- Dandapani, S. (2000). *A Text Book of Advanced Psychology*. Anmol Publication Pvt. Ltd. New Delhi, India, pp. 510.
- Ellis, A. (1987). *The Impossibility of Achieving Consistently Good Mental Health*. *American Psychologist*, 42, 364.
- Mental Health. Retrieved from [http:// www. en.wikipedia.org /wiki/ Mental_health](http://www.en.wikipedia.org/wiki/Mental_health) on 17/08/2012.
- Garrett, H. E. (2006). *Statistics in Psychology and Education*. Surjeet Publications, Delhi-7.
- Jagdish & Srivastava, A. K. (1996). *Manual of Mental Health Inventory*. Manovaigyanik Parikshan Sansthan, Vranasi, pp. 1-9.
- Lewkan, P. V. (2006). *Mental Hygiene in Public Health*, retrieved from [http:// www.msa.md.gov/ msa/ mdmanual/ 16dhmh/ html/ dhmf. html](http://www.msa.md.gov/msa/mdmanual/16dhmh/html/dhmf.html), on 16/09/12.
- Neelakandan, R. (2007). *Understanding of the Emotional Competence of School Teachers of Cuddalore District of Tamil Nadu*. Unpublished Ph. D. Thesis, Annamalai University, Tamil Nadu.
- Patricia, A. J., & Mark, T. G. (2008). *Classroom: Teacher Social and Emotional Competence in Relation to Student and Classroom Outcomes*. *Journal Navigation*, American Educational Research Association, Washington, U.S.A., 10: 3102.
- Power, A. (2010). *Transforming the Nation's Health: Next Steps in Mental Health Promotion*. *American Journal of Public Health*, 100(12), 2343–6.
- Richards, K. C., Campania, C., & Muse-Burke, J. L. (2010). *Self-care and Well-being in Mental Health Professionals: The Mediating Effects of Self-awareness and Mindfulness*. *Journal of Mental Health Counselling*, 32 (3), 247.
- Sharma, A. (1994). *Emotional Competence and Sex as correlates of Psychogenic Needs among Handicapped and Non – Handicapped Children*. (Unpublished Ph.D. Thesis). Agra: University of Agra.
- Sharma, H., & Bhardwaj, R. (1998). *Manual of Emotional Competence Scale*. MAPAN, Bal Niwas, Taj Basai, Agra, India.
- Smith, M., Segal, R., & Segal, J. (2011). *Improving Emotional Health. Healthguide*.
- Thornicroft, G. (2007). *The Lancet*. 3703 (9590): 841–850.
- World Health Report (2001). *Mental Health: New Understanding, New Hope*. World Health Organization, 2001. Retrieved from [http:// www. who. int/ whr/ 2001/ chapter1/ en/ index. html](http://www.who.int/whr/2001/chapter1/en/index.html). Retrieved from [http:// www. en. wikipedia. org/ wiki/ Mental_ health](http://www.en.wikipedia.org/wiki/Mental_health) on 01/09/2012.