



RELATIONSHIP OF ACADEMIC PERFORMANCE OF PROSPECTIVE TEACHERS WITH EMOTIONAL INTELLIGENCE AND CREATIVITY

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Received: 30 July 2012

Accepted: 13 August 2012

Abstract

The present study has been undertaken to find the relationship of academic performance of prospective teachers with their emotional intelligence and creativity. A sample consisted of 842 prospective teachers was taken from teacher education colleges affiliated to Guru Nanak Dev University, Amritsar. The data was analyzed by using Pearson's Product Moment Correlation and Two-way Analysis of Variance. The study revealed that there was positive and significant relationship exists between academic performance and emotional intelligence of prospective teachers. It was also found that there was no relationship between academic performance and creativity of prospective teachers but there was significant difference in academic performance of scheduled caste and not scheduled caste prospective teachers in relation to their creativity.

Key Words: Relationship, Academic Performance, Emotional Intelligence, Creativity

Introduction

Education is the most dominant and forceful device to bring out requisite transformations in the individual as well as the society. These changes are in terms of more extensive knowledge, better growth of intellectual ability, development of certain skills peculiar to each subject area, attitude and better adjustment to the given situation and environment. With the spread of rapid expansion of education during the last few years, the need for stressing the quality in education depends to a large extent on the teacher who is considered to be a single most important element in the whole educational process.

A teacher generally tries to teach in the way as she/he was taught during her/his own schools and college days. She/he tries to perpetuate the traditional methods of teaching. Therefore, India should develop effective professional education which may initiate the teachers to develop their professional growth and life-long education.

According to Kothari Education commission (1964-66), “A sound programme of professional education of teachers is essential for the qualitative improvement of education. Investment in teacher education can yield very rich dividends because the financial resources required are small when measured against the resulting improvements in education of millions”.

But our teachers are daily facing variety of problems in their teaching-learning process as some students do better in their studies while other students do not take interest in their studies. Why it is so? This question and many others of similar type questions create anxiety and curiosity in the mind of the teacher to understand the underlying factors which explain such type of behaviour in the students. For the answer of all these questions, the teacher may find many factors such as emotional intelligence and creativity etc. which are responsible for learning.

Highest attainment in academic field demands high intelligence, emotional intelligence and creativity etc. According to Goleman (1995) emotional intelligence encompasses five characteristics and abilities. These are self-awareness, mood management, self-motivation, empathy and managing relationships.

Both emotional intelligence and creativity differ in the mental operations. People put in a positive mood produce more original word associations (Isen et al, 1985) and perform more successfully on tests of creative ability (Estrada et al, 1994; Isen et al, 1987) than people put in negative or neutral mood states. Therefore creativity is considered as an important component of individual's success in life. A person is considered creative if he solves a problem in different manner. The production of something new is included in almost all the definitions of creativity. Kaur and Singh (2011) and Brar and Kaur (2011) showed that students who have high emotional intelligence achieved more in academics than the students who have low emotional intelligence. Otatoye et al (2010) found a very low negative insignificant relationship between academic performance and creativity. Bikar and Talip (2011) found that there was strong correlation between figural creativity and academic performance.

Objectives of the study

The present research was undertaken with the following objectives and sub-objectives in mind:

Objective-1: To study the relationship between Academic Performance and Emotional Intelligence of prospective teachers.

Sub-objectives

1A) To study the difference in Academic Performance of male and female prospective teachers in relation to their Emotional Intelligence.

1B) To study the difference in Academic Performance of Arts and Science stream prospective teachers in relation to their Emotional Intelligence.

1C) To study the difference in Academic Performance of scheduled caste and non-scheduled caste prospective teachers in relation to their Emotional Intelligence.

Objective-2: To study the relationship between Academic Performance and Creativity of prospective teachers.

Sub-objectives

2A) To study the difference in Academic Performance of male and female prospective teachers in relation to their Creativity.

2B) To study the difference in Academic Performance of Arts and Science stream prospective teachers in relation to their Creativity.

2C) To study the difference in Academic Performance of scheduled caste and non-scheduled caste prospective teachers in relation to their Creativity.

Null Hypotheses of the study

In order to achieve the above objectives and sub-objectives, three main hypotheses and three sub-hypotheses under each main hypothesis were framed.

Hypothesis-1

There exists no significant relationship between Academic Performance and Emotional Intelligence of prospective teachers.

Hypothesis-1a

There exists no significant difference in Academic Performance of male and female prospective teachers in relation to their Emotional Intelligence.

Hypothesis-1b

There exists no significant difference in Academic Performance of Arts and Science stream prospective teachers in relation to their Emotional Intelligence.

Hypothesis-1c

There exists no significant difference in Academic Performance of scheduled caste and non-scheduled caste prospective teachers in relation to their Emotional Intelligence.

Hypothesis-2

There exists no significant relationship between Academic Performance and Creativity of prospective teachers.

Hypothesis-2a

There exists no significant difference in Academic Performance of male and female prospective teachers in relation to their Creativity.

Hypothesis-2b

There exists no significant difference in Academic Performance of Arts and Science stream prospective teachers in relation to their Creativity.

Hypothesis-2c

There exists no significant difference in Academic Performance of scheduled caste and non-scheduled caste prospective teachers in relation to their Creativity.

Method of study

The sample of the study consisted of 842 prospective teachers from Educational colleges affiliated to Guru Nanak Dev University, Amritsar. The subjects were administered Mangal

Emotional Intelligence Inventory and Verbal Test of Creative Thinking. A brief introduction regarding the goal of study and assurance of confidentiality was given.

Tools used

To achieve the objectives of the study, the following tools were used.

Academic performance of prospective teachers is measured by total marks obtained in final University examination conducting by Guru Nanak Dev University, Amritsar.

Mangal Emotional Intelligence Inventory prepared and standardized by Dr. S.K.Mangal and Mrs. Shubhra Mangal (2004).

Verbal Test of Creative Thinking developed and standardized by Baqer Mehdi (2004).

Statistical techniques used

Pearsons correlation coefficient was used to find out the relationship and Two-way analysis of variance was used to find out the difference in means.

Analysis of data and discussion of results

Hypthesis-1

There exists no significant relationship between Academic Performance and Emotional Intelligence of prospective teachers.

TABLE: 1.0

Results showing mean and co-efficient of correlation between academic performance and emotional intelligence of prospective teachers

N	Academic performance	Emotional Intelligence	r
	Mean	Mean	
842	697.6	60.3	0.205**

*Significant at 0.05 level

** Significant at 0.01 level

The results shown in Table – 1.0.0 above indicate that there is positive and significant relationship between academic performance and emotional intelligence of prospective teachers. The correlation is significant at 0.01 level of probability. In the light of the above results, the null hypothesis –1 which states there exists no significant relationship between academic performance and emotional intelligence of prospective teachers is rejected. Thus Emotional intelligence was significantly correlated with academic performance of prospective teachers. It may, therefore, be concluded that Academic Performance of prospective teachers was not independent of their Emotional Intelligence. These results support the findings of Kaur and Singh (2011) and Brar and Kaur (2011).

Hypothesis-1a

There exists no significant difference in Academic Performance of male and female prospective teachers in relation to their Emotional Intelligence.

It is found that there is significant difference in the mean scores of academic performance of prospective teachers with poor (M=679.496), average (M=698.431) and good (M=747.000)

emotional intelligence as calculated value of $F=10.219$ is greater than the tabulated value i.e. 4.63 for 836/2 df at 0.01 level of significance. Similarly there is no significant difference in academic performance of male ($M=729.495$) and female ($M=705.123$) prospective teachers as calculated value of $F=2.038$ is less than the tabulated value i.e. 3.85 for 836/1 df at 0.05 level of significance. There is no significant difference in mean scores of academic performance for all levels of Emotional Intelligence for both male with poor ($M=675.926$), average ($M=696.558$) and good ($M=816.000$) emotional Intelligence and female with poor ($M=683.065$), average ($M=700.303$) and good ($M=698.431$) emotional Intelligence as calculated value of $F=1.605$ is less than tabulated value i.e. 4.63 for 836/2 at 0.05 level of significance. Thus the null hypothesis-1A which states that there exists no significant difference in Academic Performance of male and female prospective teachers in relation to their Emotional Intelligence is not rejected. It may be concluded that emotional intelligence of male and female prospective teachers has no significant effect on their academic performance.

Hypothesis-1b

There exists no significant difference in Academic Performance of Arts and Science stream prospective teachers in relation to their Emotional Intelligence.

It is found that there is significant difference in mean scores of academic performance of prospective teachers at all the three levels of Emotional Intelligence i.e. poor ($M=692.321$), average ($M=712.713$) and good ($M=733.833$) as calculated value of $F=6.044$ is greater than the tabulated value i.e. 4.63 for 836/2 df at 0.01 level of significance. Prospective teachers with good Emotional Intelligence show better Academic Performance than the prospective teachers with low and average Emotional Intelligence. There is no significant difference in mean scores of academic performance i.e., arts ($M=703.871$) and science ($M=722.041$) stream prospective teachers as calculated value of $F=2.096$ is less than tabulated value i.e. 3.85 for 836/1 df at 0.05 level of significance. Further there is no significant difference in the mean scores of academic performance of Arts stream for low ($M=677.698$), average ($M=694.247$) and good ($M=739.667$) emotional intelligence and science stream for low ($M=706.944$), average ($M=731.179$) and good ($M=728.000$) emotional intelligence as calculated $F=1.065$ is less than the tabulated value i.e. 3.00 for 836/2 df at 0.05 level of significance. Thus the null hypothesis-1B which shows that there exists no significant difference in Academic Performance of Arts and Science stream prospective teachers in relation to their Emotional Intelligence is not rejected. It may be concluded that emotional intelligence of arts and science stream prospective teachers has no significant effect on their academic performance.

Hypothesis-1c

There exists no significant difference in Academic Performance of scheduled caste and non-scheduled caste prospective teachers in relation to their Emotional Intelligence.

It is found that there is significant difference in the mean scores of Academic Performance of prospective teachers at three levels i.e. poor ($M=680.025$), average ($M=694.088$) and good ($M=738.00$) emotional intelligence as calculated value of $F=9.034$ is greater than the tabulated value i.e. 4.63 at 837/2 df for 0.01 level of significance. It reveals that the prospective teachers

who have good Emotional Intelligence show better Academic Performance. Similarly there is significant difference in the mean scores of Academic Performance of scheduled caste (M=677.964) and non-scheduled caste (M=710.099) prospective teachers as calculated value of $F=15.027$ is greater than the tabulated value i.e.6.66 for 837/1 df at 0.01 level of significance. Thus it is found that non-scheduled caste prospective teachers show better Academic Performance than scheduled caste prospective teachers. Further there is no significant difference in academic performance of prospective teachers of scheduled caste at all three levels of Emotional Intelligence i.e. poor, average and good (M=674.660) and (M=681.268) and non-scheduled caste at all three levels of Emotional Intelligence i.e. poor, average and good (M=685.391), (M=706.907) and (M=738.000) as calculated value of $F=2.524$ is less than the tabulated value i.e. 3.00 for 837/1 df at 0.05 level of significance. Thus the null hypothesis-1C which states that there exists no significant difference in Academic Performance of scheduled caste and non-scheduled caste prospective teachers in relation to their Emotional Intelligence is not rejected. It may be concluded that emotional intelligence of prospective teachers has no significant effect on their academic performance.

Hypothesis-2

There exists no significant relationship between Academic Performance and Creativity of prospective teachers.

TABLE: 2.0

Results showing mean and co-efficient of correlation between academic Performance and creativity of prospective teachers

N	Academic Performance	Creativity	r
	Mean	Mean	
842	697.6	60	0.063

*Significant at 0.05 level ** Significant at 0.01 level

The results shown in Table –2.0 above indicate that there is a no relationship between academic performance and creativity of prospective teachers. The correlation is not significant at 0.05 level of probability. In the light of the above results, the null hypothesis – 2 that there exists no significant relationship between academic performance and creativity of prospective teachers is not rejected.

Thus academic performance of prospective teachers is not correlated with their creativity. It may, therefore, be concluded that Academic Performance of prospective teachers was independent from their Creativity. These results support the findings of Olatoye et al (2010) which showed that there was no relationship between academic performance and creativity. On the other side, Bikar and Talip (2011) found that Creativity was positively related to the academic performance.

Hypothesis-2a

There exists no significant difference in Academic Performance of male and female prospective teachers in relation to their Creativity.

It is found that there is no significant difference in the mean scores of academic performance of prospective teachers for all three levels of creativity i.e. poor (M=685.841), average (M=696.230) and good (M=706.502) as calculated value of $F=1.642$ is less than tabulated value i.e. 3.00 for 836/2 df at 0.05 levels of significance. Similarly there is no significant difference in mean scores on academic performance of prospective teachers of both male (M=695.167) and female (M=697.718) as calculated value of $F=0.064$ is less than tabulated value i.e. 3.85 for 836/1 df at 0.05 level of significance. Further there is no significant difference in mean scores of male with three levels of creativity i.e. poor (M=674.733), average (M=693.482) and good (717.286) and female with the three levels of creativity i.e. poor (M=696.949), average (M=698.977) and good= (695.718) as calculated value of $F=1.716$ is less than tabulated i.e. 3.00 for 836/2 at 0.05 level of significance. This shows that the null hypothesis-2A which states that there exists no significant difference in Academic Performance of male and female prospective teachers in relation to their Creativity is not rejected. Thus it may be concluded that at all three levels of creativity of male and female prospective teachers has no significant effect on their academic performance.

Hypothesis-2b

There exists no significant difference in Academic Performance of Arts and Science stream prospective teachers in relation to their Creativity.

It is found that there is no significant difference in the mean scores of Academic Performance of prospective teachers having poor, average and good Creativity, (M=707.809), (M=710.906) and (M=706.187) respectively as calculated value of $F=0.284$ is less than the tabulated value i.e. 3.00 for 836/2 df at 0.05 level of significance. There is significant difference in the mean scores of Academic Performance of arts (M=691.101) and science (M=725.501) stream prospective teachers as calculated value of $F=23.040$ is greater than tabulated value i.e. 6.66 for 836/1 df at 0.01 level of significance. This indicates that Science stream prospective teachers show better Academic Performance than Arts stream. Further it is found that there is no significant difference in the mean scores of academic performance of prospective teachers with poor (M=687.508), average (M=692.772) and good (M=693.022) creativity of Arts stream and poor (M=728.111), average (M=729.040) and good (M=719.353) creativity of Science stream as calculated value of $F=0.328$ is less than tabulated value i.e. 3.00 for 836/2 df at 0.05 level of significance. It shows that the null hypothesis-2B which indicates that there exists no significant difference in Academic Performance of Arts and Science stream prospective teachers in relation to their Creativity is not rejected. There is no significant difference in the mean scores of Academic Performance of arts and science stream prospective teachers in relation to their creativity.

Hypothesis-2c

There exists no significant difference in Academic Performance of scheduled caste and non-scheduled caste prospective teachers in relation to their Creativity.

It is found that there is no significant difference in mean scores of Academic Performance at three levels of Creativity i.e. poor (M=688.939), average (M=693.183) and good (M=688.688) respectively as calculated value of $F=0.504$ is less than tabulated value i.e. 3.00 for 836/2 df at 0.05 level of significance. It is found that there is significant difference in mean scores of Academic Performance of scheduled caste (M=676.949) and non-scheduled caste as calculated value of $F=24.588$ is greater than tabulated value i.e. 6.66 for 836/1 df at 0.01 level of significance. Further it is found that there is significant difference in the mean scores of academic performance of scheduled caste prospective teachers at all levels of creativity i.e. poor (M=678.958), average (M=681.689) and good (M=670.200) and non-scheduled caste prospective teachers at all levels of creativity i.e. poor (M=698.920), average (M=704.678) and good (M=707.175) as calculated value of $F=10.893$ is greater than the tabulated value i.e. 4.63 for 836/2 df at 0.01 level of significance. Thus the null hypothesis-2C which states that there exists no significant difference in Academic Performance of scheduled caste and non-scheduled caste prospective teachers in relation to their Creativity is rejected. It may be concluded that creativity of scheduled caste and non-scheduled caste prospective teachers has significant effect on their academic performance.

Findings

- 1) There exists positive and significant relationship between academic performance and emotional intelligence of prospective teachers.
- 2) There exists no significant difference in Academic Performance of male and female prospective teachers in relation to their Emotional Intelligence.
- 3) There exists no significant difference in Academic Performance of Arts and Science stream prospective teachers in relation to their Emotional Intelligence.
- 4) There exists no significant difference in Academic Performance of scheduled caste and non-scheduled caste prospective teachers in relation to their Emotional Intelligence.
- 5) There exists no significant relationship between academic performance and creativity of prospective teachers.
- 5) There exists no significant difference in Academic Performance of male and female prospective teachers in relation to their Creativity.
- 7) There exists no significant difference in Academic Performance of Arts and Science stream prospective teachers in relation to their Creativity.
- 8) There exists significant difference in Academic Performance of scheduled caste and non-scheduled caste prospective teachers in relation to their Creativity.

Discussion and conclusions

- 1) It was found that there exists a significant and positive relationship between academic performance and emotional intelligence of prospective teachers. The probable reason for the above said conclusion may be assigned to the fact that in order to achieve success in life, good emotional health along with intelligence is essential for every person. It is because of emotional

health that enables one to channelize one's emotions effectively, wisely, think more positively and creatively to use emotions to solve problems. Both Grant-in-Aid and Self-finance urban colleges may provide positive organizational climate to their students which do not hurt their emotional feelings and hence improve their academic performance. But students of rural Self-financed colleges face many difficulties to complete their studies. They have fewer facilities at their home, college and even in the area where college is situated. They may feel themselves exhausted and try to just complete their course which will adversely affect their academic performance.

2) It was found that there exists no significant relationship between academic performance and creativity of prospective teachers. The fact is that creativity and academic performance are two different aspects. The persons who are creative may not be intelligent in academic field and vice versa. Creativity may be beyond the thick walls of the classroom. Since most academic examinations favour memory and cognitive abilities, it was concluded that the highly creative student is often penalized unduly. Both types of colleges may provide better educational facilities and organizational climate to their students to enhance creativity but we found no relationship between academic performance and creativity.

Educational Implications

- 1) Conducting in-service and pre-service programmes for promoting emotional intelligence in prospective teachers and teachers' educators may be useful for improving academic performance.
- 2) The system in Teachers' educational Colleges should be more open and more accepting of divergent views. Teachers must promote divergent thinking in right prospective.
- 3) Teachers' educators must initiate novel/original ideas which help to develop creativity of students. The prospective teachers should be given training in developing good human relationships which would be ultimately helpful in creating healthy atmosphere in the institution and will promote emotional intelligence, creativity and academic performance.

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