Effect of one year Face to Face B. Ed. Programme on Professional Commitment

Deepa Sikand Kauts¹* and Varinder Kaur²

¹MGN college of Education Jalandhar
²GTB Khalsa College of Education, Dasuya (Hoshiarpur)

*Corresponding author: Deepa Sikand Kauts; deepagaumit@yahoo.com

Abstract

The study investigated the effect of one year face to face B.Ed. programme on the professional commitment of the teacher interns in relation to type of institutions, academic streams and university system. The sample constituted of 1257 teacher interns belonging to science and humanities streams drawn from fifteen education Colleges from two universities i.e.Guru Nanak Dev University Amritsar and Panjab University Chandigarh were selected from government-aided and self-financed. The effect of execution of B.Ed. programme on the professional commitment of the teacher interns was studied with the help of a pre-test, post-test experimental design with 2×2×2 factorial design taking gain scores of professional commitment as dependent variable. The results revealed that teacher interns of government-aided institution exhibited significantly higher gain in professional commitment than their counterparts in self-financed institutions. Whereas teacher interns following different academic streams were studying from different universities did not differ gain significantly in their professional commitment.

The interaction effects between institution types and academic streams, between academic streams and university system and between university system and institution types on the gain scores of professional commitment were reported significant.

Keywords: There is a paradigm shift in the teacher education in the lament of quality deterioration in the 1970s and the 1980s mostly centred on the mushrooming B.Ed. courses, which were mostly regarded as poor and deficient in quality.

The NCTE succeeded in regulating these courses during the first couple of years of its existence. And then, quietly, everything changed with great mushrooming of teacher education institutions from around a mere 2,500 to over 14,000 in the next seven years came as a shocking surprise to many. The entire
country knew how teacher education institutions were approved and what was happening in the name of preparing teachers who would be entrusted with shaping the future generations in comprehensive development of their personalities. The Annual Status of Education Report (ASER) 2012 is out and has already generated discussion on the state of education in the country. A quick survey of some figures seem to point to a mix of a movement forward – especially in terms of infrastructure and broad enrolment ratio – and a certain movement backward in terms of learning skills and teacher performance. It would be perhaps useful to have a brief look at some of the findings and to note with alarm the fact that the principal investigators of the report feel that there is indeed a ‘deepening crisis in education’, especially mass education in the country. And this crisis, they feel, is like ‘an unseen and quiet killer disease’ of which the government, education policy makers and educationists in the country ought to take serious cognisance.

Pratham is the largest non governmental organisation working to provide quality education to the underprivileged children of India. Pratham has identified the education quality as a problem in developing countries because of high teacher absence, high student absence and low achievement. For example ASER survey in India finds that about 35% of children age 7-14 could not read a grade 1 paragraph, and 60% cannot read grade 2 stories in 2005. More troublingly, no progress since 2005.

Improvement of quality of education is required due to the fast degeneration of values in our country. In India on one hand, corruption is rampant and on the other hand communalism, separatism, isolation, untouchability; bigotry and exploitation of man by man have become the order of the day. We notice that violence, selfishness, black-marketing and beastly tendencies have increased tremendously. India was looted by the foreign rulers during the pre-independence period whereas in the post-independence period we have been looted by our own people. Nobody seems to be concerned about the present state of India in which dirty and nauseating politics has resulted in the near doom of the country. India was ranked 94th out of 176 countries in Transparency International’s 2012 Corruption Perception Index (CPI) released on 5 December 2012. In 2011, India was ranked 95 out of 183 countries. Disobedience of public rule is the general tendency of human being. We all would agree that driving on Indian roads is really messy and can easily make any sane being lose his/her sanity. One, we have humongous Traffic which throngs the roads. Two, we all are a little impatient, a bit ignorant and a lot over-optimistic when it comes to driving. The road network in India, the numbers of registered motor vehicles in the country and the country’s population have increased at a compound annual growth rate (CAGR) of 3.4%, 9.9% and 1.6% respectively, during the decade 2001 to 2011. During the same period, the number of road accidents in the country increased at a CAGR of 2.1%. Similarly, the number of road accident fatalities and the number of persons injured in road accidents in the country between 2001 and 2011 increased by 5.8% and 2.4% respectively. The youth in India have been in a mood of frustration and confusion and they do not know whom to follow as their ideals. The country does not provide them attitudinal environment which would give youth the opportunities-to-show their strength ability. This is due to the lack of quality of teachers who can focus, integrate values with delivery of content through innovative and focussed curriculum transaction strategies. It is not helping in the development of wholesome personality of the learner. So, there is need to analyse the factors which can help in preparing teachers
with professional commitment who not only can teach effectively but develop students into citizens who are committed to society, country and human values.

In a 2010 report by National Council for Teacher Education (NCTE), it was estimated that India needs an additional 1.2 million school teachers if it is to fulfil the Right to Education Act requirement of 1:30 teacher-student ratio across the country. The current national average student-teacher ratio in India is 1:44 at primary school level (MHRD 2010-11). To meet the vision of the RTE, India needs to focus both on increasing the supply of teachers (an estimated 1.2 million teachers are required), but perhaps even more importantly to improve the quality of our Teacher Education Programs. There are many candidates who are ‘eligible’ to become teachers; very few possess the required commitment and competencies.

Running regular face to face teacher education programs with limited intakes will not be sufficient to meet this requirement. There is a need too look outside the existing models to reach out a large number of teachers waiting to be trained while meeting the quality requirements.

**Professional Commitment**

NCTE (1998) emphasised the need for quality teacher education in terms of competency based and commitment oriented teacher education. It is presumed that if teachers acquire professional competencies and commitment, it will result in sound teacher performance. In the functional sense, professional commitment on the part of teacher-educators essentially consists not only in doing their best for introducing teacher-trainees to the competencies that they would need as teachers in school, but also practically inspiring them to inculcate values of the teaching profession. Teacher Commitment has been viewed as a multidimensional concept. For instance, Meyer and Allen (1991) defined organizational commitment from three different perspectives: affective, continuance, and normative commitment. According to Meyer and Allen (2004), employees with a strong affective commitment remain with the organization because they want to do so (desire); those with strong normative commitment stay because they feel they ought to (moral obligation); and those with strong continuance commitment stay because they have to do so (recognition of the costs), otherwise they have to deal with the consequences associated with leaving the organization.

Recently, professional commitment has been one of the most studied workplace constructs that received a considerable attention from the educational researchers as well as the organizational researchers. There are growing number of studies devoted to identify both the antecedents and the outcomes of professional commitment. A great deal of research has been conducted that attempts to link commitment with desirable work outcomes. Lortie (1975) regarded commitment as the willingness an individual enacts in investing personal resources to the teaching task. Rosenholtz (1987) used a sociological perspective to study teacher commitment and suggested that an uncommitted staff leads to devalue work and orient towards satisfaction other than those that come from successful job performance. That professional development enhanced teacher commitment was found by Martinez-Ponz (1990); at the same time Rutter and Jacobson (1989) found no direct relationship between staff development and teacher commitment. Research findings suggest that
low levels of commitment might result in decreased student achievement tests, higher teacher absenteeism and increased staff turnover (Kushman, 1992; Reyes and Fuller, 1995; Rosenholtz, 1989). Fresco, Kfir and Nasser (1997) found that teaching experience was negatively associated with teacher commitment whereas Riehl and Sipple (1996) found that the same variables were not significantly associated.”

Teacher commitment is crucial to effective schools, teacher satisfaction and retention (Singh and Billingsley, 1998; Fresko, Kfir and Nasser, 1997). Teachers’ commitment is thought to decrease progressively over the course of their teaching career (Fraser, Draper and Taylor, 1998; Huberman, 1993). Singh and Billingsley (1998), Graham (1996), Reyes and Fuller (1995) found that collaboration (defined as two or more teachers working together on a task) was associated with higher levels of commitment. Commitment is part of a teacher’s affective or emotional reaction to their experience in a school setting (Ebmeier and Nicklaus, 1999). A study by Tiernan (2000) revealed that the organizationally committed teachers value religion, faith and teaching. As cited by Elliott and Crosswell (2001) “Some teachers see their commitment as part of their professional identity, it defines them and their work and they ‘get a lot of enjoyment from this.’ Some other teachers feel the demands of teaching to be significant, requiring great personal investment and view it as a job that can ‘take over your life’ (Nias, 1981). Gohier (2001) concluded that a teacher shares a relationship with his teaching profession. This involves the relationship with work, the relationship with responsibilities (towards society, the reflexivity of his educational work), the relationship with learners (an affective and also an intellectual relationship: guiding the pupil in building knowledge), the relationship with colleagues and the teaching body and finally the relationship with the school as a social institution. Park (2005) advanced two strong reasons why teacher commitment should be emphasized in the fields of education. First, commitment was an internal force coming from within teachers themselves who had needs for greater responsibility, variety and challenge in their work as their level of participation in education had grown. Second, there were external forces directing both reform and development in education and seeking higher standards and greater accountability that were dependent upon each teacher’s combined efforts, as well as the sustained efforts of the teachers within each school or institutional group. Therefore, it is widely accepted that committed teachers are valuable assets within the institutions.

The present study is an attempt to study the effect of teacher preparation programme on the teacher commitment and its dimensions given by NCTE i.e. learner, society, profession, attaining excellence for professional actions and basic human values.

**Operational Definition of Key Word**

Professional commitment of the teacher is to devote personal time and dedicated towards his profession. According to NCTE, five dimensions of teacher commitment have been identified namely, commitment to the learner, society, profession, achieve excellence and basic human values have been taken as measured by scale of Teacher Commitment developed by the investigator on the basis of the following definitions.
Commitment to the Learner: Commitment to the learner implies genuine love for the learner, readiness to help the learner, enthusiasm, friendship, concern for their all-round development etc. Teachers should make sincere efforts for the wholesome development of the children in every respect under their caring nature.

Commitment to the Society: Teacher commitment to the community may basically relate to the developing sense of equity for the children of poor and illiterate parents, awareness of, and concern about, the impact of the teachers’ work on the development of the community, democratic values and the nation.

Commitment to the Profession: This commitment area involves two essential components viz. pride in one’s being in the teaching profession and a strong desire for professional development. During and even after school hours, a committed teacher’s mind always remains occupied with thoughts of children, their growth individually as well as collectively and improvement of their performance.

Commitment to Attaining Excellence for Professional Actions: in all aspects of a teacher’s roles and responsibilities, care and concern for doing everything in the classroom, in the school.

Commitment to the Basic Values: The teachers commitment to the basic values is very urgent as well as important, specially in the context of the crisis of values. To become a role model in the classroom and community through genuine and consistent practice of professional values such as impartiality, objectivity and intellectual honesty, national loyalty etc.

Objective

- To study the effect of one year face to face B. Ed programme on the Professional Commitment among teacher interns.

Hypotheses

- There is no significant difference in the professional commitment of the B.Ed. interns of government-aided and self-financed B.Ed. colleges; of science and humanities streams; of Guru Nanak Dev University Amritsar and Panjab University Chandigarh.

- There is no interaction between type of institutions and academic streams; of academic streams and university systems; types of institutions and university systems on the gain scores of the professional commitment among B.Ed. interns.

- There is no interaction among types of institutions, academic streams and university systems on the gain scores of the professional commitment among B.Ed. interns.

Sample

In order to conduct the study, 1257 teacher interns belonging to science and humanities streams drawn from fifteen education Colleges from two universities i.e.Guru Nanak Dev University Amritsar
and Panjab University Chandigarh were selected from government-aided and self-financed colleges. Fifteen Colleges from each university are selected randomly out of self-financed or government-aided Institutions and Academic streams i.e. science and humanities.

**Tools Used**

TOOL I  Scale of Teacher Commitment- Prepared by the Investigator.

TOOL II  Teacher Attitude Inventory by Ahluwalia S. P. (1978).

TOOL III  Adapted tool of General Teaching Competencies Scale by Passi B.K.,and Lalita M.S.(2009).

**Table 1: Means of Sub-Sample Groups of Anova For 2×2×2 Factorial Design for Professional Commitment Gain Scores**

<table>
<thead>
<tr>
<th></th>
<th>GNDU</th>
<th>PU</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M₁ = 43.46</td>
<td>M₂ = 41.74</td>
<td>M₁₂ = 42.60</td>
<td>M₁₂₃₄ = 39.44</td>
<td></td>
</tr>
<tr>
<td>σ₁ = 26.02</td>
<td>σ₁₂ = 35.66</td>
<td>σ₁₂ = 31.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N₁ = 157</td>
<td>N₁₂ = 157</td>
<td>N₁₂ = 314</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M₃ = 30.00</td>
<td>M₄ = 42.56</td>
<td>M₃₄ = 36.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>σ₃₁ = 28.78</td>
<td>σ₄₁ = 34.87</td>
<td>σ₃₄ = 32.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N₃ = 157</td>
<td>N₄ = 157</td>
<td>N₃₄ = 314</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Self-Financed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M₅ = 40.16</td>
<td>M₆ = 24.04</td>
<td>M₅₆ = 32.10</td>
<td>M₅₆₇₈ = 34.93</td>
<td></td>
</tr>
<tr>
<td>σ₅₁ = 21.45</td>
<td>σ₆₁ = 48.21</td>
<td>σ₅₆ = 38.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N₅ = 157</td>
<td>N₆ = 157</td>
<td>N₅₆ = 314</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M₇ = 37.26</td>
<td>M₈ = 38.25</td>
<td>M₇₈ = 37.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>σ₇₁ = 22.83</td>
<td>σ₈₁ = 28.65</td>
<td>σ₇₈ = 25.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N₇ = 157</td>
<td>N₈ = 157</td>
<td>N₇₈ = 314</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M₁₃₅₇ = 37.72</td>
<td>M₂₄₆₈ = 36.65</td>
<td>M₃₇₈ = 37.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M₁₃ = 36.73</td>
<td>M₂₄ = 42.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M₅₇ = 38.71</td>
<td>M₆₈ = 31.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M₁₅ = 41.81</td>
<td>M₂₆ = 32.89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M₃₇ = 33.63</td>
<td>M₄₈ = 40.40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M₁₂₅₆ = 37.35</td>
<td>M₄₇₈ = 37.02</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Design and Procedure

The factorial design $2 \times 2 \times 2$ has been employed on the gain scores of professional commitment, where in type of institutions, Different Streams and the university system of B.Ed interns have been independent variables and have been used for the purpose of classification viz. Government-Aided and Self-Financed B. Ed colleges; students belonging to Science and Humanities stream from Guru Nanak Dev University Amritsar and Panjab University Chandigarh. Professional commitment is studied as dependent variable. A pre-test of professional commitment is administered on all the B. Ed. interns at the starting of the session, and then a post test of professional commitment administered at the end of the session. Finally the scores of pre-test and post-test are used to calculate gain in professional commitment as a outcome of regular B.Ed programme.

Analysis and Interpretation

The means of sub-groups for $2 \times 2 \times 2$ factorial design on professional commitment gain scores were calculated and have been presented in the Table 1.

In order to analyse the variance, the obtained scores were subjected to ANOVA. The results have been presented in the Table 2.

<table>
<thead>
<tr>
<th>Sources of Variation</th>
<th>Df</th>
<th>SS</th>
<th>MSS</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution Type (A)</td>
<td>1</td>
<td>6394.551</td>
<td>6394.551</td>
<td>6.301**</td>
</tr>
<tr>
<td>Academic Stream (B)</td>
<td>1</td>
<td>35.111</td>
<td>35.111</td>
<td>.035</td>
</tr>
<tr>
<td>University System (C)</td>
<td>1</td>
<td>361.685</td>
<td>361.685</td>
<td>.356</td>
</tr>
<tr>
<td>Institution Type × Academic Stream (A × B)</td>
<td>1</td>
<td>11256.051</td>
<td>11256.051</td>
<td>11.091**</td>
</tr>
<tr>
<td>Academic Stream × University System(B × C)</td>
<td>1</td>
<td>13227.529</td>
<td>13227.529</td>
<td>13.034**</td>
</tr>
<tr>
<td>Institution Type × University System (A × C)</td>
<td>1</td>
<td>19335.338</td>
<td>19335.338</td>
<td>19.052**</td>
</tr>
<tr>
<td>Institution Type × Academic Stream × T University System (A × B × C)</td>
<td>1</td>
<td>155.545</td>
<td>155.545</td>
<td>.153</td>
</tr>
<tr>
<td>Within</td>
<td>1248</td>
<td>1266565.338</td>
<td>1014.876</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1256</td>
<td>3054006.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at the 0.01 level confidence
** Significant at the 0.01 level confidence
Main Effects

Institution Type, Academic Streams and University System

(A, B and C)

It may be observed from the Table 2 that F-ratio for the difference between means of professional commitment gain score of two types of the institution namely, government-aided and self-financed B. Ed. colleges, was found to be significant at the 0.01 level of confidence, whereas, F Ratios for the difference between means of professional commitment gain scores of students belonging to humanity and science stream; students belonging to Panjab university and Guru Nanak Dev university, were not found to be significant.

The examination of the corresponding group means from the Table 1 suggests that the mean gain scores of professional commitment among government-aided institutions were more than the self-financed institutions. Meaning thereby, B.Ed. interns studied in government-aided institutions exhibited significantly higher gain in professional commitment than their counterparts in self-financed institutions as outcome of B. Ed. programme.


On the other hand, the examination of the corresponding group means from the Table 1 suggests that the mean gain scores of professional commitment of science and humanities Stream, and the mean gain scores of professional commitment of Guru Nanak Dev University Amritsar and Panjab University Chandigarh were found to be comparable as outcome of B.Ed face to face.

Two Order Interaction

Institution Type × Academic Streams (A × B)

It may be observed from the Table 2 that F-ratio for the interaction between institution type and academic streams on the gain scores of professional commitment gain scores, was found to be significant at the 0.01 level of confidence. To further analyze the significance of difference in various cells, t-ratios have been computed to know the inter cell differences due to which F-ratios for the interaction have been found to be significant and are presented below in the Table 3.
Table 3: T-Ratios for the difference in Means of various cells of 2×2 Design on Professional Commitment Gain Scores

<table>
<thead>
<tr>
<th>Mean group</th>
<th>Mean</th>
<th>Mean</th>
<th>SEₜ</th>
<th>D</th>
<th>t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>M₁₂-M₅₆</td>
<td>42.6</td>
<td>32.10</td>
<td>2.779</td>
<td>10.50</td>
<td>3.78**</td>
</tr>
<tr>
<td>M₁₂-M₃₄</td>
<td>42.6</td>
<td>36.28</td>
<td>2.543</td>
<td>6.32</td>
<td>2.49**</td>
</tr>
<tr>
<td>M₁₂-M₇₈</td>
<td>42.6</td>
<td>37.75</td>
<td>2.286</td>
<td>4.85</td>
<td>2.12*</td>
</tr>
<tr>
<td>M₅₆-M₃₄</td>
<td>32.10</td>
<td>36.28</td>
<td>2.828</td>
<td>4.18</td>
<td>1.48</td>
</tr>
<tr>
<td>M₅₆-M₇₈</td>
<td>32.10</td>
<td>37.75</td>
<td>2.60</td>
<td>5.65</td>
<td>2.18*</td>
</tr>
<tr>
<td>M₃₄-M₇₈</td>
<td>37.75</td>
<td>37.75</td>
<td>2.346</td>
<td>1.48</td>
<td>0.63</td>
</tr>
</tbody>
</table>

*significant at the 0.05 level of confidence
**significant at the 0.01 level of confidence

M₁₂-Science (Govt.), M₅₆-Science (Self-Financed), M₃₄-Humanities (Govt.), M₇₈-Humanities (Self-Financed)

It may be observed from the Table 3 that means of sub-groups of professional commitment gain scores reveals that t-ratios are significant for sub-group namely M₁₂-M₇₈ and M₅₆-M₇₈ at the 0.05 level of confidence M₁₂-M₅₆, M₁₂-M₃₄ at the 0.01 level of confidence. The further examination of means reveals that:

1. Teacher interns of science streams of government-aided institutions showed significant gain on professional commitment than teacher interns of science streams of self-financed institutions, teacher interns of humanities streams of government-aided institutions as well as self-financed institutions.

2. Teacher interns of humanities streams of self-financed institutions showed significant gain on professional commitment than teacher interns of science streams of self-financed institutions.

The results are in tune with the findings of Steers (1977), James and James (1989), Agoro (2002) and Babajide (2010).

Academic Streams × University System (B × C)

It may be observed from the Table 2 that F-ratio for the interaction between academic streams and the university system on the gain scores of professional commitment, was found to be significant at the 0.01 level of confidence.

To further analyse the significance of difference in various cells, t-ratios have been computed to know the inter cell differences due to which F-ratios for the interaction have been found to be significant and are presented below in the Table 4.
Table 4: T-Ratios for the difference in Means of Various Cells of 2×2 Design on Professional Commitment Gain Scores

<table>
<thead>
<tr>
<th>Mean group</th>
<th>Mean</th>
<th>Mean</th>
<th>SE_d</th>
<th>D</th>
<th>t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>M_{15}-M_{37}</td>
<td>41.81</td>
<td>33.63</td>
<td>2.00</td>
<td>8.18</td>
<td>4.09**</td>
</tr>
<tr>
<td>M_{15}-M_{26}</td>
<td>41.81</td>
<td>32.89</td>
<td>2.788</td>
<td>8.92</td>
<td>3.20**</td>
</tr>
<tr>
<td>M_{15}-M_{48}</td>
<td>41.81</td>
<td>40.40</td>
<td>2.25</td>
<td>1.41</td>
<td>0.63</td>
</tr>
<tr>
<td>M_{37}-M_{26}</td>
<td>33.63</td>
<td>32.89</td>
<td>2.853</td>
<td>0.74</td>
<td>0.26</td>
</tr>
<tr>
<td>M_{37}-M_{48}</td>
<td>33.63</td>
<td>40.40</td>
<td>2.331</td>
<td>6.77</td>
<td>2.90**</td>
</tr>
<tr>
<td>M_{26}-M_{48}</td>
<td>32.89</td>
<td>40.40</td>
<td>3.034</td>
<td>7.51</td>
<td>2.48**</td>
</tr>
</tbody>
</table>

*significant at the 0.05 level of confidence
**significant at the 0.01 level of confidence

M_{15}- Science (GNDU), M_{37}- Humanities (GNDU), M_{26}- Science (PU), M_{48}- Humanities (PU)

It may be observed from the Table 4 that means of sub-groups of commitment gain scores reveals that t-ratios are significant for sub-group namely M_{15}-M_{37}, M_{15}-M_{26}, M_{37}-M_{48} and M_{26}-M_{48} at the 0.01 level of confidence. The further examination of means reveals that:

1. Teacher interns of science streams studied from Guru Nanak Dev University, Amritsar exhibited significant gain on professional commitment than their counterparts in humanity stream of Guru Nanak Dev University, Amritsar and science stream of Panjab University, Chandigarh.

2. Teacher interns of humanities stream studied from Panjab University, Chandigarh exhibited higher gain in professional commitment than their counterparts belonging to science stream studied in Panjab University, Chandigarh.

The results are in tune with the findings of Salancik (1977), Mowday, Steers and Porter (1979), Porter and Steers (1982), Meyer and Allen (1991).

**Institution Type × University System (A × C)**

It may be observed from the Table 2 that F-ratio for the interaction between institution type and university system on gain scores of professional commitment, was found to be significant at the 0.01 level of confidence.

To further analyse the significance of difference in various cells, t-ratios have been computed to know the inter cell differences due to which F-ratios for the interaction have been found to be significant and are presented below in the Table 5:
Table 5: T-Ratios for the Difference in Means of Various Cells of 2×2 Design on Professional Commitment Gain Scores

<table>
<thead>
<tr>
<th>Mean group</th>
<th>Mean</th>
<th>Mean</th>
<th>SE$_d$</th>
<th>D</th>
<th>t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>$M_{13}$-$M_{57}$</td>
<td>36.73</td>
<td>38.71</td>
<td>2.025</td>
<td>1.98</td>
<td>0.98</td>
</tr>
<tr>
<td>$M_{13}$-$M_{24}$</td>
<td>36.37</td>
<td>42.15</td>
<td>2.546</td>
<td>5.42</td>
<td>2.13*</td>
</tr>
<tr>
<td>$M_{13}$-$M_{68}$</td>
<td>36.73</td>
<td>31.15</td>
<td>2.773</td>
<td>5.59</td>
<td>2.02*</td>
</tr>
<tr>
<td>$M_{57}$-$M_{24}$</td>
<td>38.71</td>
<td>42.15</td>
<td>2.348</td>
<td>3.44</td>
<td>1.47</td>
</tr>
<tr>
<td>$M_{57}$-$M_{68}$</td>
<td>38.71</td>
<td>31.15</td>
<td>2.592</td>
<td>7.56</td>
<td>2.92**</td>
</tr>
<tr>
<td>$M_{24}$-$M_{68}$</td>
<td>42.15</td>
<td>31.15</td>
<td>3.017</td>
<td>11.00</td>
<td>3.65**</td>
</tr>
</tbody>
</table>

*significant at the 0.05 level of confidence
**significant at the 0.01 level of confidence

It may be observed from the Table 5 that means of sub-groups of commitment gain scores reveals that t-ratios are significant for sub-group namely $M_{13}$-$M_{24}$ and $M_{13}$-$M_{68}$ at the 0.05 level of confidence $M_{57}$-$M_{68}$ and $M_{24}$-$M_{68}$ at the 0.01 level of confidence. The further examination of means reveals that:

1. Teacher interns of government-aided institutions of Panjab University, Chandigarh exhibited higher gain in professional commitment than their counterparts studied in government-aided institutions of Guru Nanak Dev University, Amritsar and self-financed institutions of Panjab University, Chandigarh.

2. Teacher interns of government-aided institutions of Guru Nanak Dev University, Amritsar gain significantly higher professional commitment than their counterparts in self-financed institutions of Panjab University, Chandigarh. Whereas, the same group exhibited significantly lesser professional commitment than their teacher interns in self-financed institutions of Guru Nanak Dev University, Amritsar.

The results are in tune with the findings of Allen and Meyer (1984) and Somech and Bogler (2002).

**Three Order Interaction**

**Types of the Institution × Streams × The University System (A × B × C)**

It may be observed from the Table 2 that F-ratio for the interaction between means of professional commitment gain scores of types of the institution, streams and the university system was not found to be significant at the 0.05 level of confidence.

There is no interaction among institution types, academic streams and university system on the gain scores of professional commitment among teacher interns.
Discussion of Findings and Educational Implications

1. As an outcome of face to face one year B. Ed. Programme, government-aided institutions infused significantly higher gain in professional commitment among B.Ed interns than their counterparts studied in self-financed institutions. The students belonging to different streams or studied in the two universities exhibited comparable professional commitment.

The findings of the study regarding low level of professional on the part of self-financed institutions are about in line with previous researches of the similar nature. For example, research study conducted by Taylor and Dale (1971) gave results that 17% of probationary teachers had the intentions to leave teaching profession within five years. In the same way Kyriacou and Sutcliffe (1979) found that 23.5% of teachers surveyed indicated they would very likely not remain within the teaching profession within the coming ten years. Research study conducted in Australia (Solman and Field, 1989) suggested that 27% of teachers would not remain with their profession. While Travers (1990) found that 66% of the sample surveyed in the United Kingdom had the intentions to quit the teaching profession in the previous five years. This, however, may be countered by the high rate of unemployment and the perception that teaching offers a low degree of security (Sten and Van Wyk, 1999). Kirmizi and Deniz (2009) observed that a secure job is an employees’ requirement and wish. Job insecurity affects an employee’s commitment to the organization. One of the important reason of lesser professional commitment in self-financed institutions is rigid supervisory behaviour by the management of the institutions. This is supported by Kahn (1990) argues that a rigid supervisory style negatively influences workers’ motivation and commitment.

The research reported that faculty members in government-aided institutions depicted higher level of professional commitment as compared to their counterparts in the self-financed institutions. One of the possible reasons for such attitude may be that individuals in government-aided institutions feel competent in work role as it fulfils the employee’s psychological needs and wants to be the part of the institution, while in Self-financed institutions these needs are not observable. Accordingly psychological needs were reported to be major cause of organizational commitment by Allen and Meyer (1984).

Teacher interns reported strong professional commitment if they are provided supportive working environment. In this regards the B.Ed. interns in government-aided institutions are treated fairly and are guided with a better leadership. Teacher educators of government-aided institution are more involved in the professional activities like undertaking research, writing research papers, conducting workshops and seminars, attending conferences, workshops and seminars and presenting papers, etc. Fair human resource policies and practices also contribute to the development of professional commitment. These findings are supported by other researchers like Mercado (2000), Meyer, Stanley, Herscovitch, Topalnytsky (2002) indicating that an organization’s general atmosphere and specific employee factors are keys to understanding organizational commitment. Joiner and Bakalis (2006) suggest that employees who perceive a friendly and supportive relationship with their supervisors will possess a strong positive commitment to their organizations. Katz and Rosenzweig (1998) suggest that adequate support from the supervisor encourages employees’ positive attitudes and loyalty to the organization.

In the light of above discussion on the finding the researcher have drawn following conclusion that, there are many factors responsible for teacher commitment to their profession like security of job, behaviour of supervisor, psychological needs, working environment, participation in professional
activities like undertaking research, writing research papers, conducting workshops and seminars, attending conferences, workshops and seminars and presenting papers, etc. These factors will help to make teacher educator more committed towards their profession and help to generate professionally committed teacher interns. Government-aided teacher interns are more committed because they perceive all those factors than their counterpart self-financed institution.

Henceforth, the implication is to impose strict measures on self financed institutions w.r.t. security of service and supportive work environment.

2. The finding revealed that as an outcome of face to face one year B.Ed. Programme, teacher interns of science streams of government-aided institutions showed significant gain in professional commitment than teacher interns of science streams in self-financed institutions; teacher interns of humanities streams in government-aided institutions as well as self-financed institutions. Probably, Government-aided institutions fulfil the psychological needs in the form of scholarships and provide enriched laboratories and supportive working environment to the science teacher interns for the development of attitude. More conducive working environment of government-aided institutions helps to make the government-aided science teacher interns more committed than self-financed institution.

Steers (1977) found that work environment relates to the atmosphere in which an individual works in an organization. Individuals join organizations because of their needs and desires; and they expect an environment where their can nourish and also their needs get satisfied. Positive relations between peers and with management affect an employee’s commitment to the organization. James and James (1989) suggest that organizational climate represents the way in which the workers perceive and interpret their proximal job environment. According to Agoro (2002) commitment to science, includes learners’ interest, attitudes, values and other affective behaviours of learners to science. According to Babajide (2010) commitment to Science is a state in which learners are willing, and desire to devote more time, energy, work, interest, affection and values to science.

On the contrary, teacher interns of humanities streams of self-financed institutions showed significant gain on professional commitment than teacher interns of science streams in self-financed institutions. Most of the self financed institutions have more students of humanity stream, lacks infrastructural facilities and involvement of students in many of the co-curricular activities.

Students belonging to humanity stream in self-financed institutions are showing more commitment than science streams in self-financed institution because curriculum of B.Ed. is rich in co-curricular activities and teacher interns of humanities are showing more interests and participations in these activities. That interest is generated right from the time of schooling due to belongingness towards society but science students are willing and desire to devote more time, energy, work, interest, affection and value to science subject. So, they are not spending much time for participation in those activities. Broh (2002) revealed that students’ participation in co-curricular activities in general is associated with an improved grade point average, higher education aspiration, increased attendance and reduced absenteeism. Marsh and Kleitman (2002) also established that students who participated in co-curricular activities performed better academically than students who did not participate. Adeyemo’s (2010) view that besides creating a
school culture and promoting school spirit, co-curricular activities have been found to have a relationship with students’ academic performance, development of responsibility, discovering their abilities and interest, self-discipline and leadership skills. Karim, Lodhi and Usman (2011) found in government schools mostly they have large grounds in their schools but the management does not arrange sports and games in schools. Private school teachers have the chance to show their capabilities in different spheres by means of co-curricular activities because in private schools frequently these activities are arranged by management.

In this context, there seems to be need to enrich laboratories, providing exposure to different activities and competitions so that all students develop enriched attitude and professional commitment.

1. The finding revealed that as an outcome of face to face one year B. Ed. Programme, teacher interns of science streams of studied from Guru Nanak Dev University, Amritsar exhibited significant gain on professional commitment than their counterparts in humanity stream in Guru Nanak Dev University, Amritsar and science stream of Panjab University, Chandigarh.

2. Teacher interns of humanities stream studied from Panjab University, Chandigarh exhibited higher gain in professional commitment than their counterparts in science stream studied in Panjab University, Chandigarh. Probable reason could be the curriculum of Panjab University, Chandigarh as it is rich in co-curricular activities and teacher interns of humanity stream are showing more interest and participation in these activities. Moreover, Panjab university conducts various inter and intra zonal activities, which infuses more commitment among those who actively participate and create a lively environment.

3. Teacher interns of government-aided institutions of Panjab University, Chandigarh exhibited higher gain in professional commitment than their counterparts in government-aided institutions of Guru Nanak Dev University, Amritsar and self-financed institutions of Panjab University, Chandigarh. The probable reason is structure of the university which is more democratic in its working, curriculum which is more diversified and activity oriented and involvement of the students in inter and intra zonal activities and of course govt. aided institutions provide secure and stable environment.

References


Mercado P. 2000. Organizational commitment in an institution of public health in the state of Mexico, *Universidad Nacional Autonoma de Mexic.*


Reyes, P., and Fuller, E. J. 1995. The effects of selected elements of communal schools and middle and high school mathematics achievement. Wisconsin; Center for Education Research, Madison; Center on Organization and Restructuring of Schools, Madison, WI. (ERIC Document Reproduction Service No. ED 384 955).


