A STUDY OF THE EFFECT OF MENTAL HEALTH ON THE TEACHING EFFECTIVENESS OF B.ED. STUDENT-TEACHERS

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The WHO Department of Mental Health and substance abuse emphasizes that the number of persons exposed to extreme stressors is large and that exposure to extreme stressors is a risk factor for mental health and social problems. The work of the Department of Mental Health focuses mostly on resource poor countries in case of emergencies. In these countries most of the population is exposed to natural disasters and war-like situations. The teacher should have a sound mental health as he or she needs to ensure all round development of students. Mentally healthy people have positive attitude towards their own group and other people. While working in a group they always feel happy and show good behaviour, get guidance regarding studies and have satisfying personal relationships with pupils. Mentally healthy teachers make use of their natural capacities and they welcome new experiences and new ideas for ensuring the overall development of their students.

KEYWORDS: Inclusion, Collaboration, Co-teaching, Secondary School, Special Educator

BACKGROUND AND RATIONALE

The World Health Organisation 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. It was previously stated that there is no one official definition of mental health. Cultural differences, subjective assessments, and competing professional theories all affect how
mental health is defined. There are different types of mental health problems, some of which are common, such as depression and anxiety disorders, and some not so common, such as schizophrenia and bipolar disorder. According to Richards, Campania, and Muse-Burke (2010) there is growing evidence that is showing emotional abilities are associated with prosaically behaviours such as stress management and physical health. Majid (1984), findings were obtained and self-acceptance was found to be a common factor to all groups. Girls were open mindedness. Prasanna (1984) found that all the mental health variables studied, discriminated between high and low achievers in the most of the groups. Singh (1987), reported that the difference in teaching effectiveness of urban and rural teachers was not significant. Veereshwar (1979) found that the difference in adjustment of urban and rural girls was not significant in the area of health.

Poor mental health is also associated with rapid social change, stressful work conditions, gender discrimination, social exclusion, and unhealthy lifestyle, risks of violence and physical ill-health and human rights violations. There are also specific psychological and personality factors that make people vulnerable to mental disorders. Lastly, there are some biological causes of mental disorders including genetic factors and imbalances in chemicals in the brain.

**OBJECTIVES OF THE STUDY**

The main objectives of the study are as follows:

1. To study the correlation between mental health and teaching effectiveness of B.Ed. student-teachers.
2. To study the independent as well as interactional effect of residential background, sex and level of mental health on the teaching effectiveness of B.Ed. student-teachers.

**HYPOTHESES**

The main hypotheses of the study are as follows:

**Ho1:** There is no significant correlation between mental health and teaching effectiveness of B.Ed. student-teachers.

**Ho2:** There is no significant independent as well as interactional effect of residential background, sex and level of mental health on the teaching effectiveness of B.Ed. student-teachers.
RESEARCH METHODOLOGY

SAMPLE

The sample consisted of 90 B.Ed. student-teachers with 45 male and 45 female teachers from three B.Ed. colleges in Katol Taluka District of Nagpur. There was equal representation of B.Ed. student-teachers with respect to the gender (male and female), residential background (rural and urban). The data is presented in Table 1.

Table 1

Sample for the Study.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>11</td>
<td>12</td>
<td>23</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>34</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>46</td>
<td>89</td>
</tr>
</tbody>
</table>

TOOLS USED

Following tools were employed to collect data by the researcher:

1. Mental Health Scale

A 60-items Mental Health Scale developed and standardized by Sharma was use by the researcher to measure mental health of B.Ed. student teachers. The 60 items were divided into 30 positive and 30 negative items. For positive items the weightage for “Yes” is ‘2’, for “Undecided” its ’1’, and for “No” is ’0’. For the negative items the weightage for “Yes” is ’0’, for “Undecided” its ‘1’, and for “No” its ‘2’.

The norms that apply for the mental health scale are given in Table 2.

Table 2

The Measurable Scheme of Mental Health.

<table>
<thead>
<tr>
<th>Level of Mental Health</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Mental Health</td>
<td>68 and above</td>
<td>66 and above</td>
</tr>
<tr>
<td>Average Mental Health</td>
<td>56-67</td>
<td>54-65</td>
</tr>
<tr>
<td>Low Mental Health</td>
<td>55 and less</td>
<td>53 and below</td>
</tr>
</tbody>
</table>

2. Teaching Effectiveness Scale

A 69-item Teaching Effectiveness Scale developed and standardized by Kumar and Mutha was used by the researcher to measure teaching effectiveness of B.Ed. student teachers. All statements are given as likert type and weightage
for “Strongly disagree” is ’5’, for “Agree” is ’4’, for “Undecided” is ’3’, for “Disagree” is ’2’ and for “Strongly Agree” is ’1’. Table 3 gives the norms for the teaching effectiveness scale.

**Table 3**

The Measurable Scheme of Teaching Effectiveness.

<table>
<thead>
<tr>
<th>Level of Teaching Effectiveness</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>176 and above</td>
</tr>
<tr>
<td>Average</td>
<td>160-175</td>
</tr>
<tr>
<td>Low</td>
<td>175 and less</td>
</tr>
</tbody>
</table>

**RESULTS OF THE STUDY**

The results of the study are discussed in this section.

**Ho1:** There is no significant correlation between mental health and teaching effectiveness of B.Ed. student-teachers.

**Table 4**

Correlation between Mental Health and Teaching Effectiveness.

<table>
<thead>
<tr>
<th>Correlation Between</th>
<th>N</th>
<th>r</th>
<th>df</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health and Teaching Effectiveness</td>
<td>87</td>
<td>0.24*</td>
<td>85</td>
<td>at 0.05 level</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level

From Table 4 it is evident that the value of r is 0.24 which is significant at 0.05 level with df=85. This means that correlation between mental health and teaching effectiveness is significant in this context that the null hypothesis there is no significant correlation between mental health and teaching effectiveness of B.Ed. student-teachers is rejected. It may therefore be concluded that the teaching effectiveness of B.Ed. student-teachers depends on their mental health.

**Ho2:** There is no significant independent as well as interaction effect of residential background, sex and level of mental health on the teaching effectiveness of B.Ed. student-teachers.
Table 5
Summary of Two-way Anova of Teaching Effectiveness.

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>df</th>
<th>Sum of Squares SS</th>
<th>Mean of SS MSS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among the Groups</td>
<td>(k-1) (8-1=7)</td>
<td>(73506.2)</td>
<td>(10500.885)</td>
<td>12.782**</td>
</tr>
<tr>
<td>Between the Groups</td>
<td>(i) SSB Residential Background</td>
<td>(k1-1) (2-1=1)</td>
<td>194.63</td>
<td>194.63</td>
</tr>
<tr>
<td></td>
<td>(ii) SSB Sex</td>
<td>(k2-1) (2-1=1)</td>
<td>14751.79</td>
<td>14751.79</td>
</tr>
<tr>
<td></td>
<td>(iii) SSB Mental Health</td>
<td>(k3-1) (2-1=1)</td>
<td>59220.01</td>
<td>59220.01</td>
</tr>
<tr>
<td></td>
<td>(iv) SSB Residential Background×Sex</td>
<td>(k1-1)(k2-1)(1×1=1)</td>
<td>58559.78</td>
<td>58559.78</td>
</tr>
<tr>
<td></td>
<td>(v) SSB Sex×Mental Health</td>
<td>(k2-1)(k3-1)(1×1=1)</td>
<td>-465.6</td>
<td>-465.6</td>
</tr>
<tr>
<td></td>
<td>(vi) SSB Residential Background×Mental Health</td>
<td>(k1-1)(k3-1)(1×1=1)</td>
<td>14091.56</td>
<td>14091.56</td>
</tr>
<tr>
<td></td>
<td>v) SSB Residential Background ×Sex×Mental Health</td>
<td>(k1-1)(k2-1)(k3-1)(1×1×1=1)</td>
<td>-660.23</td>
<td>-660.23</td>
</tr>
<tr>
<td>Error/Within groups</td>
<td>(N-k) (79-8=71)</td>
<td>58326.08</td>
<td>821.49</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Significant at 0.01 level**

Our calculated F values for residential background, sex and mental health are greater than the table value of F i.e. 7.01. Therefore, the obtained F ratio values are significant at 0.01 level. Hence the null hypothesis in relation to residential background; sex and level of mental health are rejected.

In case of interaction effect the obtained F ratio value -0.8036 is found lower than the F value given in table at 0.05 level of significance. Thus the F for interaction effect is significant at 0.01 level. Hence, null hypothesis for interaction effect is accepted.

Independent Effects

Residential Background:

From the ANOVA summary table, the F ratio value for residential background is found 0.2369, which is low in comparison to the F value given in F table for 1 and 71 df. Therefore, F ratio for residential background variable is found insignificant at 0.05 level (Figure 1). Hence null hypothesis is accepted. In conclusion it can be said that rural and urban B.Ed. student-teachers are equally good in their teaching effectiveness.
Figure 1. Mean Values of Teaching Effectiveness of Urban and Rural B.Ed. Student-Teachers.

Sex:

From the ANOVA summary table, the F ratio value for sex is found 17.957, which is high in comparison to the F value given in F table for 1 and 71 df. Therefore, F ratio for sex variable is found significant at 0.01 level. Hence null hypothesis is rejected. In conclusion it can be said that in 99% cases, the male B.Ed. student-teachers are high in teaching effectiveness in comparison to the female students. There is 1% chance that the female B.Ed. student-teachers are better in teaching effectiveness than the male (Figure 2).

Figure 2. Mean Values of Teaching Effectiveness of Male and Female of B.Ed. Student-Teachers.
Mental Health:
From the ANOVA summary table, the F ratio value for mental health is found 72.088, which is high in comparison to the F value given in F table for 1 and 71 df, which is also significant at 0.01 level. Hence null hypothesis is rejected at 0.01 level of confidence. Therefore, in 99% cases the mental health of B.Ed. student-teachers is high in their teaching effectiveness in comparison to the low mental health B.Ed. student-teachers (Figure 3). Only in 1 case out of 100, the low mental health B.Ed. student-teachers are high in teaching effectiveness.

Figure 3. Mean Values of Teaching Effectiveness of Low and High Mental Health of B.Ed. Student-Teachers.

Interaction effect:
Residential Background and Sex:
From the ANOVA summary table, the F ratio value for joint effect of residential background and sex is found significant at 0.01 level. Hence null hypothesis is rejected. Therefore, the joint effect of residential background and sex do differ in their teaching effectiveness. In other words, both male and female from urban and rural background are not equal in their teaching effectiveness (Figure 4A and 4B).
Figure 4(A) and 4(B). Interaction Effect between Sex (Male and Female) and Residential Background (Rural and Urban) of B.Ed. Student Teachers.

**Sex and Mental Health:**

From the ANOVA summary table, the F ratio value for joint effect of sex and mental health is found insignificant at 0.01 level. Hence null hypothesis is accepted. Therefore, on the joint effect of sex and mental health student-teachers do not differ in their teaching effectiveness. In other words, it can be said that both males and females who are high in their mental health are equally good in their teaching effectiveness. Similarly, the low mental health male and female students also do not differ in teaching effectiveness (Figure 5).
Figure 5. Interaction Effect between Sex (Male and Female) and Level of Mental Health (Low and High) of B.Ed. Student Teachers.

Figure 6(A) and 6(B). Interaction Effect between Level of Mental Health (Low and High) and Residential Background (Rural and Urban) of B.Ed. Student Teachers.
Residential Background and Mental Health:
From the ANOVA summary table, the F ratio value for joint effect of residential background and mental health is found significant at 0.01 level. Hence, null hypothesis is rejected. Therefore, the joint effect of residential background and mental health do differ in their teaching effectiveness. In other words, both urban and rural students who are low and high in their mental health are not equal in their teaching effectiveness (Figure 6A and 6B).

Residential Background, Sex and Mental Health:
From the ANOVA summary table, the F ratio value for interaction effect is found insignificant even at 0.05 level of significance for 1 and 71 df. Thus the null hypothesis is accepted.

Figure 7(A) and 7(B). Interaction Effect between Sex (Male and Female) and Residential Background (Rural and Urban) and Level of Mental Health (Low and High) of B.Ed. Student Teachers.
Therefore, the joint effect of residential background, sex and mental health does not affect the teaching effectiveness. In other words, it can be said that both urban and rural, male and female students who are high in their mental health are equally good in their teaching effectiveness. Similarly, the low mental health, male and female students who are from urban and rural residential background also do not differ in their teaching effectiveness. In other words, urban, male and female students who have high and low mental health do not differ in their teaching effectiveness (Figure 7A and 7B).

**DISCUSSION OF RESULTS**

The objective was to study the correlation between mental health and teaching effectiveness. The results show that there is no significant correlation between mental health and teaching effectiveness of B.Ed. student-teachers. It may therefore be concluded that the teaching effectiveness of B.Ed. student teachers is dependent on their mental health. The other objective was to analyse the calculated F values for residential background; sex and mental health which were found to be greater than the table F value 7.01. Therefore, the obtained F ratio values are significant at 0.01 level of significance. Hence the null hypothesis in relation to residential background; sex and level of mental health are rejected.

In case of interaction effect the obtained F ratio value -0.8036 is found lower than the F value given in table at 0.05 level of significance. Thus the F for interaction effect is significant at 0.01 level. Hence, null hypothesis for interaction effect is accepted.

A study of the effect of Mental Health on the teaching effectiveness of B.Ed. student-teachers gives the following conclusions:

- the teaching effectiveness of B.Ed. student teachers depends on their mental health.
- rural and urban B.Ed. student-teachers are equally good in their teaching effectiveness
- the male B.Ed. student-teachers are high in teaching effectiveness in comparison to the female student-teachers.
- the B.Ed. student-teachers who are high on their mental health are also high in their teaching effectiveness in comparison to the low mental health B.Ed. student-teachers.
- both male and female student-teachers who belong to urban and rural areas are not equal in their teaching effectiveness.
• both male and females who are high in their mental health are equally good in their teaching effectiveness. Both urban and rural students who are low and high in their mental health are not equal in their teaching effectiveness.

• the joint effect of residential background, sex and mental health does not affect teaching effectiveness. In other words, it can say that both urban and rural, male and female who high in their mental health are equally good in their teaching effectiveness.

REFERENCES


