Abstract

Intelligence is an ability which is responsible for learning, adapting, thinking, judging and constructing. Howard Gardner has advocated the multiple forms of intelligences among the human being in 1983 by publishing book “Frames of Mind: The Theory of Multiple Intelligences” (1983). Multiplicity of intellectual abilities has been introduced by the Gardner. Initially, he has introduced seven fundamental intelligences like verbal – linguistic intelligence, logical – mathematical intelligence, special – visual intelligence, bodily – kinaesthetic intelligence, musical intelligence, interpersonal and intrapersonal intelligence correspondingly. Researcher in this study has intended the existence potency of multiple intelligences among the secondary students who are studying in secondary schools under the West Bengal Secondary Board of Education. In this regard, researcher has developed a data collection instrument to assess the existence level of multiple intelligences among the students. On the basis of key dimensions of intelligence, the items of the questionnaire have been developed and thereafter they have been standardized properly by following the appropriate standardization procedures. In this connection, different descriptive and inferential statistical computation has been implemented. At the end of the study, researcher has found the negligible variation in average performance in terms of the potency of multiple types of intelligences.
1. Introduction

Intelligence is a power to change the world and its nature. One can explore the features of this world by discovering its systematic bio-chemical, bio-psychological, bio-physical mechanism. Intelligence is a common psychological energy which presence in all dimensional activities of the society. It is reliable notation that higher performer in the scale of multiple intelligence will be much benefited in all concerned activities. Detection of the existence of one intelligence in higher potency, then it will be concluded that concerned person will be eminent on concerned filed of activities. For example, if an individual is higher performer in musical intelligence; then it will be interpreted as to that person will be very scholar in musical activities in coming future. In multiple intelligences related studies among the school learner has the higher predictability about the future standing of the student. In 1983, Howard Gardener introduced with seven types of intelligences. Verbal – linguistic intelligence is an ability to be effective in using the language and related factors; this ability will be helpful to occupy the verbal skills and sensitivity to the phonetics and morphology respectively. Logical –mathematical intelligence is an ability to carry out the abstract operation and to conceptualize the logical and corresponding numerical pattern. Spatial-visual intelligence is an ability to make image about the abstract things and to visualize images accurately. Bodily-kinesthetic intelligence is an ability to monitor own physiological movement as per the objectives and also to control own psycho-motor organism properly. Musical intelligence is an ability to conceptualise the qualities of music properly. Interpersonal intelligence is an ability to realize others psychological properties and to conceptualize them properly. Intrapersonal intelligence is an ability to be self-aware about own different properties like feelings, values, thinking and so on. Multiple intelligences are essentially important on the basis of the application of human intelligence in different styles.

2. Emergence of the study

Theoretically it is assumed that multiple intelligences can influence multiple dimensions of the academic performance in school curriculum. Varieties of intellectual capacity may regulate other faculties of the learner for better improvement in academic issues. For recommending about the potency of existed multiple intelligences among the secondary school students, this research design has been framed. For observing potency of multiple intelligences among the students, present study has been emerged.

3. Objectives of the Study

After completing the research study, investigator intends to observe some fundamental aspects related to the study of multiple intelligences. Those objectives are –

- To measure multiple intelligences of the secondary school students on the basis of seven separate dimensions.
- To assess the potency level or degree of multiple intelligences of the secondary students.
- To determine the gender wise and locality wise difference among the samples of the study on the basis of multiple intelligences.

4. Hypothesis

On the basis of inference about different qualities of the variable of this study, following hypothesis have been developed for testing.
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From the above table, it is interpreted that it all cases of this study concerning multiple intelligence has found the uniformity in average performance of the secondary students. The range of mean score has belonged between 120.38 and 121.63 in all cases of classificatory variables of this study.

**MIUB → Multiple Intelligence of Urban Boy Students, MIUG → Multiple Intelligence of Urban Girls Students, MIRB → Multiple Intelligence of Rural Boy Students, MIRG → Multiple Intelligence of Rural Girls Students, MIURBAN → Multiple Intelligence of Urban Students, MIRURAL → Multiple Intelligence of Rural Students, MIBOYS → Multiple Intelligence of Boy Students, MIGIRLS → Multiple Intelligence of Girls Students, MITOTAL → Multiple Intelligence of Total Students**

From the above table, it is interpreted that it all cases of this study concerning multiple intelligence has found the uniformity in average performance of the secondary students. The range of mean score has belonged between 120.38 and 121.63 in all cases of classificatory variables of this study.

For presenting the strata wise difference in terms of descriptive statistics, the above table has been explored. From this graph, it has been interpreted that top of the mean bar touch the same line and the approximately same result of SD values are nearer to each other. But, slight variation in terms of minimum and maximum score has been found in terms of selected classificatory variables. Bars of MIRG, MIRURAL, MIGIRLS and MITOTAL have crossed the score line of 140 score of the corresponding graph.

**MITOTAL → Multiple Intelligence of Total Students**

Figure 7.1: Mean, SD, Minimum Score and Maximum of the Distribution

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From the above table, it is interpreted that percentage of score between two percentile point and below $P_{10}$ and $P_{90}$ has been presented one by one. In the case of MITOTAL, 12.92% scores exist above the $P_{90}$ point; 8.38% scores exist below $P_{10}$ respectively. Locality wise 0.4 % difference has been found in terms of score distribution in terms of multiple intelligences; this means multiple intelligence of secondary students of urban and rural area is very negligible. Similarly, Gender wise 0.84% difference has been found.
The corresponding pie-chart represents the existence potency of multiple intelligences among the classificatory predetermined variables. Higher performers in multiple intelligences have been belonged above \( P_{90} \) point of the measuring scale, from this evidence it is interpreted that more students have gotten maximum score in terms of multiple intelligences.

To assess strata wise mean difference corresponding ‘t’ test has been computed. From the table, it will be interpreted that gender, locality and gender plus locality wise mean difference on the basis of multiple intelligence have been found insignificant at 0.05 and 0.01 level of significant.

### Table -7.3: Mean Difference in Different Strata

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>( t )</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIUB - MIUG</td>
<td>-1.31111</td>
<td>15.51513</td>
<td>2.31286</td>
<td>-5.97237 to 3.35015</td>
<td>-5.67</td>
<td>44</td>
<td>.574</td>
</tr>
<tr>
<td>MIRB - MIRG</td>
<td>1.26667</td>
<td>16.47136</td>
<td>3.00725</td>
<td>-4.88384 to 7.41717</td>
<td>4.21</td>
<td>29</td>
<td>.677</td>
</tr>
<tr>
<td>MIUB - MIRB</td>
<td>-3.43333</td>
<td>11.39172</td>
<td>2.07983</td>
<td>-7.68707 to .82040</td>
<td>-1.651</td>
<td>29</td>
<td>.110</td>
</tr>
<tr>
<td>MIUG - MIRG</td>
<td>.41818</td>
<td>15.14582</td>
<td>2.04226</td>
<td>-3.67631 to 4.51267</td>
<td>.205</td>
<td>54</td>
<td>.839</td>
</tr>
<tr>
<td>MIURBAN - MIRURAL</td>
<td>-.49000</td>
<td>14.59728</td>
<td>1.45973</td>
<td>-3.38642 to 2.40642</td>
<td>.336</td>
<td>99</td>
<td>.738</td>
</tr>
<tr>
<td>MIBOYS - MIGIRLS</td>
<td>.13333</td>
<td>16.54260</td>
<td>1.91018</td>
<td>-3.67277 to 3.93944</td>
<td>.070</td>
<td>74</td>
<td>.945</td>
</tr>
</tbody>
</table>

### 8. Conclusion

Pre-determined three objectives of this study have been filled at the end of investigation. Multiple intelligences have been assessed on the basis of developed and standardized test. The existence potency of multiple intelligence have been scattered among the secondary schools students in Malda District; trends of higher performance has been observed in direction to above percentile point of the scale. In the case of No. 3 objective, strata wise mean difference have been found insignificant.

### References

