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Abstract
This study has been conducted to assess the impact of motor educability on academic achievement of
adolescent boys of Jammu and Kashmir. To conduct the study, 250 adolescent boys studying in various
schools operational in the State of Jammu and Kashmir were selected as sample. In all 50 adolescent
boys from age group 13+ years age, 14+ years age, 15+ years age, 16+ years age and 17+ years age were
selected randomly. Motor educability of selected subjects was assessed with the help of modified version
of Johnson’s test of motor educability (1932) consisting of items such as front roll, back roll, jumping
half turns and jumping full terms. Academic achievement of selected subjects was assessed with the help
of previous year marks. In order to distribute adolescent boys in high, average and low level of motor
educability, quartile methods was used. One Way ANOVA showed significantly superior academic
achievement in adolescent boys exhibiting higher magnitude of motor educability as compared to
adolescent boys exhibiting average and low level of motor educability. It was concluded that motor
educability is strongly associated with academic achievement of adolescent boys.

Keywords: Motor educability, adolescent, academic achievement

1. Introduction
Motor educability in general refers to learning new motor skills with relative ease. Learning is
attaining innovative or amending existing knowledge, skills etc. Learning also encompasses
different types of information. According to Adams (1976) [1] motor learning is a progression
of acquiring, mastering and applying motor information to execute certain easy or complex
motor movements. It is closely associated with cognitive abilities, mental prowess of an
individual.

In India great emphasis is placed on academic achievement. This is not unusual because of its
importance for adolescent to get better chances for studies in higher education institutions. Due
to so much importance of academic achievement in India researcher have conducted studies to
ascertain the factors associated with it. In this relation association of motor coordination was
educability in relation to intelligence. But academic achievement although related with intelligence
is little bit different because achievement is based on knowledge or acquired skills. Hence the
researcher decided to assess academic achievement of adolescent boys in the light of their
proficiency in motor educability.

1.1 Objectives
The objective of the present study is to assess the impact of motor educability on academic
achievement of adolescent boys.

1.2 Hypothesis
It was hypothesized that grades of motor educability will significantly influence academic
achievement of adolescent boys.

2. Methodology
The following methodological steps were taken in order to conduct the present study.
2.1 Sample
To conduct the study, 250 adolescent boys studying in various schools operational in the State of Jammu and Kashmir were selected as sample. In all 50 adolescent boys and girls from age group 13+ years age, 14+ years age, 15+ years age, 16+ years age and 17+ years age were selected randomly.

2.2 Tools
Motor Educability Test
Motor educability of selected subjects was assessed with the help of modified version of Johnson’s test of motor educability (1932) consisting of items such as front roll, back roll, jumping half turns and jumping full terms. This test is highly reliable and valid.

2.3 Procedure
- 250 adolescent boys between 13 to 17 years age were selected randomly from schools operational in Jammu and Kashmir.
- After following ethical consideration, the selected subjects performed all four items of Johnson’s motor educability test. The scores on each item were summed up.
- The final academic grade marks were obtained from respective schools records.
- To distribute subjects with high, average and low level of motor educability, Q₁ and Q₃ statistical technique was used. The 25th percentile score on motor educability test was 19.00 while the 75th percentile score was 32. The scores of adolescent boys falling above P75 (Q₃) were considered as high level of motor educability, scores lying below P25 (Q₁) were considered as low level of motor educability while scores between the above quartile treated as average level of motor educability. To compare academic achievement of adolescent boys so distributed in high, average and low motor educability group. One Way ANOVA and Least Significant Difference Test was used. The results are presented in table 1 and 2 respectively.

3. Results

Table 1: Descriptive Statistics of Scores on Academic Achievement among Adolescent Boys with Varying Degree of Motor Educability (N=250)

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent Boys - High Motor Educability</td>
<td>65</td>
<td>85.16</td>
<td>15.67</td>
</tr>
<tr>
<td>Adolescent Boys - Average Motor Educability</td>
<td>120</td>
<td>74.72</td>
<td>16.12</td>
</tr>
<tr>
<td>Adolescent Boys - Low Motor Educability</td>
<td>65</td>
<td>67.61</td>
<td>15.44</td>
</tr>
</tbody>
</table>

F=20.31, p<.01

The F=20.31 shown in table 1 indicate that academic achievement of adolescent boys exhibiting high level of motor educability (M=85.16), average level of motor educability (M=74.72) and low level of motor educability (M=67.61) differ significantly.

Table 2: Comparison of Mean Scores on Academic Achievement in a Group of Adolescent Boys with High, Moderate and Low Motor Educability (N=250) Least Significant Difference Test with Significance Level .05

<table>
<thead>
<tr>
<th>Mean (I)</th>
<th>Mean (J)</th>
<th>Mean Difference (I-J)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent Boys with High Motor Educability</td>
<td>Adolescent Boys with Moderate Motor Educability</td>
<td>10.44*</td>
</tr>
<tr>
<td></td>
<td>Adolescent Boys with Low Motor Educability</td>
<td>17.55*</td>
</tr>
<tr>
<td>Adolescent Boys with Moderate Motor Educability</td>
<td>Adolescent Boys with Low Motor Educability</td>
<td>7.10*</td>
</tr>
</tbody>
</table>

* Significant at .05 level

Statistical data shown in table 2 gives following inferences:

- Academic achievement of adolescent boys with high level of motor educability was found to be significantly superior as compared to adolescent boys exhibiting average and low level of motor educability. The mean difference of 10.44 and 17.55 was found to be statistically significant at .05 level.
- Academic achievement of adolescent boys with average level of motor educability was found to be significantly superior as compared to adolescent boys exhibiting low level of motor educability. The mean difference of 7.10 was found to be statistically significant at .05 level.

On the basis of analysis of data, following results are obtained:

4. Discussion
Results clearly state the strong influence of motor educability on academic achievement of adolescent boys. This is not surprising because academic achievement is final outcome based on knowledge or acquired skills. Similarly motor educability is related to cognitive abilities and defined as learning new motor skills with relative ease. Hence adolescent subjects with more proficiency to acquire new motor skills are also adept at gaining knowledge in the field of academics.

5. Conclusion
On the basis of results, it can be concluded that proficiency in motor educability may predict academic excellence of adolescent boys. It may also be concluded that both academic and motor proficiency are dependent on learning new skills or knowledge, hence they are inter-related with each other.

6. References
2. Bonifacci P. Children with low motor ability have lower...


