Welcome to ISRJ

Indian Streams Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double-blind peer reviewed referred by members of the editorial board. Readers will include investigators in universities, research institutes, government and industry with research interest in the general subjects.

Regional Editor
Mr. Dikonda Govardhan Krushanahari
Professor and Researcher,
Rayat shikshan sanstha’s, Rajarshi Chhatrapati Shahu College, Kolhapur.

International Advisory Board

Mohammad Hailat
Dept. of Mathematical Sciences, University of South Carolina Aiken

Abdullah Sabbagh
Engineering Studies, Sydney

Eccaterina Patrascu
Spiru Haret University, Bucharest

Loredana Bosca
Spiru Haret University, Romania

Fabricio Moraes de Almeida
Federal University of Rondonia, Brazil

George - Calin SERITAN
Faculty of Philosophy and Socio-Political Sciences Al. I. Cuza University, Iasi

Hasan Baktir
English Language and Literature Department, Kayseri

Ghayoor Abbas Chotana
Dept of Chemistry, Lahore University of Management Sciences[PK]

Anna Maria Constantinovici
AL. I. Cuza University, Romania

Ilie Pintea,
Spiru Haret University, Romania

Xiaohua Yang
PhD, USA

Editorial Board

Pratap Vyamaktrao Naikwade
ASP College Devruk,Ratnagiri,MS India

R. R. Patil
Head Geology Department Solapur University,Solapur

Rama Bhosale
Prin. and Jt. Director Higher Education, Panvel

Salve R. N.
Department of Sociology, Shivaji University,Kolhapur

Govind P. Shinde
Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai

Chakane Sanjay Dnyaneshwars Arts, Science & Commerce College, Indapur, Pune

Awadhesh Kumar Shirotriya
Secretary,Play India Play,Meerut(U.P.)

Iresh Swami
Ex - VC. Solapur University, Solapur

N.S. Dhaygude
Ex. Prin. Dayanand College, Solapur

Narendra Kadu
Jt. Director Higher Education, Pune

K. M. Bhandarkar
Praful Patel College of Education, Gondia

Sonal Singh
Vikram University, Ujjain

G. P. Patankar
S. D. M. Degree College, Honavar, Karnataka

Maj. S. Bakhtiar Choudhary
Director,Hyderabad AP India.

S.Parvathi Devi
Ph.D.-University of Allahabad

Sonal Singh,
Vikram University, Ujjain

Rajendra Shendge
Director, B.C.U.D. Solapur University, Solapur

R. R. Yalikar
Director Management Institute, Solapur

Umesh Rajderkar
Head Humanities & Social Science YCMOU, Nashik

S. R. Pandya
Head Education Dept. Mumbai University, Mumbai

Alka Darshan Shrivastava
Shaskiya Snatkottar Mahavidyalaya, Dhar

Rahul Shriram Sudke
Devi Ahilya Vishwavidyalaya, Indore

S.KANNAN
Annamalai University, TN

Satish Kumar Kalhotra
Maulana Azad National Urdu University
MENTAL ABILITY OF SECONDARY STUDENTS

Dr. M. Karuppasamy

Principal, Thiruvalvar College of Education for Women, Mallapuram, Elumalai, Madurai, Tamil Nadu

Abstract: The present study was aimed to find out the mental ability of secondary students. Normative survey method was used. The sample comprised of 250 secondary students in Madurai. Data was analyzed by using t-test and F-ratio. Results found that there is no significant difference in mental ability of secondary students with regard to gender, type of school, locality of school, medium of school, nature of school, parental occupation, birth order and type of family.

Keywords: Mental Ability, Secondary Students.

INTRODUCTION

In spite of its wide and common current usage and ancient roots, general mental ability is relatively a recent concept of psychology. Almost every writer on the subject has put forward his own definition and some in the fullness of time have offered even more than one. It is true that some of the apparent agreement is mainly verbal but many of them reflect fundamental differences of opinion concerning the concept of general mental ability.

General mental ability is a concept rather than a power or a thing that can be observed. It abuses difficulty when its definition is attempted and it leads to a great variety of interpretations. Intelligence, as far as a layman is concerned, manifests itself in terms of how an individual behaves in society. According to Stern (1914), “intelligence is the general capacity of an individual to consciously adjust his thinking to new requirements. It is general mental adaptability to new problems and conditions of life. According to McMillan (1990), intelligence means the ability to reason and to profit by experience. An individual’s level of intelligence is determined by a complex interaction between his heredity and environment. According to Gardner’s (1999) theory of multiple intelligence, there are at least eight separate intelligences - logical, linguistic, spatial, bodily, kinesthetic, interpersonal, intrapersonal and naturalist. He has stressed that there may be more kinds of intelligence-eight is not a magic number. Recently, he has speculated that there may be spiritual intelligence and an existential intelligence or the abilities to contemplate big questions about the meaning of life. He says that individuals may excel in one of these eight areas but have no remarkable abilities in the other seven. So, if boys excel in math and science, it does not mean they are more intelligent than females. Gardener contends that intelligence is the ability to solve problems and create products or outcomes that are valued by culture. We know that with the physical development of the child his intellectual development also takes place. The speed of intellectual development is rather slow in earlier years. The child cannot possibly perform such tasks that require high mental abilities. His Mental abilities develop with the advancing years and he is able to solve the complex problems of life. Some of the features of these mental abilities are given below.

- All these qualities and abilities develop side by side.
- However, there may be differences in the rate of development of these qualities and abilities at various stages of the child. There may be a quicker development of one aspect or area of mental activity than the other at one stage of life. Other aspects may fully develop at the other stage.
- Even those qualities and abilities, which do not develop at a particular stage and have a faint development at that
stage. They develop to full extent as the child grows older and older.

**OBJECTIVES OF THE STUDY**

- To find out the significant difference in mental ability of secondary students based on gender, type of school, locality of school, medium of instruction, nature of school, parental occupation, birth order and type of family.

**HYPOTHESES**

1. There is no significant difference in mental ability of secondary students in respect of gender.
2. There is no significant difference in mental ability of secondary students in respect of type of school.
3. There is no significant difference in mental ability of secondary students in respect of locality of school.
4. There is no significant difference in mental ability of secondary students in respect of medium of instruction.
5. There is no significant difference in mental ability of secondary students in respect of nature of school.
6. There is no significant difference in mental ability of secondary students in respect of parental occupation.
7. There is no significant difference in mental ability of secondary students in respect of birth order.
8. There is no significant difference in mental ability of secondary students in respect of type of family.

**METHOD & SAMPLE**

Normative survey method is used for the present study. A random sample of 250 secondary students was chosen from Madurai District, Tamil Nadu.

**Tool**
- Mental Ability by Dr. Rama Tiwari & Roma Pal.

**Data Analysis**

**Table 1: Mental Ability of Secondary Students based on Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>129</td>
<td>43.07</td>
<td>5.93</td>
<td>0.934</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Female</td>
<td>121</td>
<td>43.77</td>
<td>5.89</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table-1, the t-value 0.934 is less than the table (1.96) at 0.05 level of significance. Hence, the hypothesis-1 is accepted.

**Table 2: Mental Ability of Secondary Students based on Type of School**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>df</th>
<th>F</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>26.640</td>
<td>13.320</td>
<td>2</td>
<td>0.379</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Within Groups</td>
<td>8676.096</td>
<td>35.126</td>
<td>247</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8702.736</td>
<td>35.126</td>
<td>249</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table-2 shows that the F-value 0.379 is not significant at 0.05 level. Hence, the hypothesis-2 is accepted.

**Table 3: Mental Ability of Secondary Students based on Locality of School**

<table>
<thead>
<tr>
<th>Locality of School</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>117</td>
<td>44.17</td>
<td>5.91</td>
<td>1.926</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Urban</td>
<td>133</td>
<td>42.74</td>
<td>5.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table-3, the t-value 1.926 is less than the table (1.96) at 0.05 level of significance. Hence, the hypothesis-3 is accepted.
Table 4: Mental Ability of Secondary Students based on Medium of Instruction

<table>
<thead>
<tr>
<th>Medium of Instruction</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamil</td>
<td>114</td>
<td>43.43</td>
<td>5.72</td>
<td>0.055</td>
<td>Not Significant</td>
</tr>
<tr>
<td>English</td>
<td>136</td>
<td>43.39</td>
<td>6.08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table-4, the t-value 0.055 is less than the table (1.96) at 0.05 level of significance. Hence, the hypothesis-4 is accepted.

Table 5: Mental Ability of Secondary Students based on Nature of School

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Square</th>
<th>Mean Square</th>
<th>df</th>
<th>F</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>56.363</td>
<td>28.181</td>
<td>2</td>
<td>0.805</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Within Groups</td>
<td>8646.373</td>
<td>35.006</td>
<td>247</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8702.736</td>
<td></td>
<td>249</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table-5 depicts that the F-value 0.805 is not significant at 0.05 level. Hence, the hypothesis-5 is accepted.

Table 6: Mental Ability of Secondary Students based on Parental Occupation

<table>
<thead>
<tr>
<th>Parental Occupation</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gov. Employee</td>
<td>118</td>
<td>43.33</td>
<td>6.09</td>
<td>0.216</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Self-Employee</td>
<td>132</td>
<td>43.49</td>
<td>5.76</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table-6, the t-value 0.216 is less than the table (1.96) at 0.05 level of significance. Hence, the hypothesis-6 is accepted.

Table 7: Mental Ability of Secondary Students based on Birth Order

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Square</th>
<th>Mean Square</th>
<th>df</th>
<th>F</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>19.122</td>
<td>9.561</td>
<td>2</td>
<td>0.272</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Within Groups</td>
<td>8683.614</td>
<td>35.156</td>
<td>247</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8702.736</td>
<td></td>
<td>249</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table-7 shows that the F-value 0.272 is not significant at 0.05 level. Hence, the hypothesis-7 is accepted.

Table 8: Mental Ability of Secondary Students based on Type of Family

<table>
<thead>
<tr>
<th>Type of Family</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint</td>
<td>119</td>
<td>43.10</td>
<td>5.70</td>
<td>0.781</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Nuclear</td>
<td>131</td>
<td>43.69</td>
<td>6.10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table-8, the t-value 0.781 is less than the table (1.96) at 0.05 level of significance. Hence, the hypothesis-8 is accepted.

FINDINGS

• There is no significant difference in mental ability of secondary students in terms of gender, type of school, locality of school, medium of instruction, nature of school, parental occupation, birth order and type of family.
REFERENCES

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

**Associated and Indexed, India**

- International Scientific Journal Consortium
- OPEN J-GATE

**Associated and Indexed, USA**

- Google Scholar
- EBSCO
- DOAJ
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Database
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Indian Streams Research Journal
258/34 Raviwar Peth Solapur-413005, Maharashtra
Contact-9595359435
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com
Website : www.oldisrj.lbp.world