Effect of Adolescence Education Programme, Age and Sex on Adolescence Awareness of Adolescents

DR. RAJESH I. BHATT
Principal,
Sardar Patel College of Education, Bakrol, Anand,
Gujarat (India)

Abstract:
This study investigated effect of adolescence education programme, age and sex on adolescence awareness of adolescents. So, researcher has to decide this study, the sample of this study 320 adolescent students of secondary schools, in which 160 for experimental group and 160 for control group and measurement the adolescence awareness, the tool prepared by researcher. Data manipulation according to variables and hypotheses of this study and found that mean score of adolescence education programme group is significantly higher than that of control group, mean score of adolescent students is significantly higher than that of pre-adolescent students and mean score of boys is significantly higher than that of girls.

Keywords: Adolescence awareness, Adolescence education programme

1. Introduction
Adolescence is the spring of life. It is the period when an individual is neither a child nor an adult. This period comes compulsorily in the life of every individual, but its complex nature has its origin in the increasing complexity of the modern civilization as well as the culture of the nation to which the adolescents belong. It is the attractive-but uneven, insecure and strange path from childhood to maturity. It is the period where growth takes place in every walk of life. Individual grows to maturity not only physically but mentally, socially and emotionally during this period. Great mental and physical changes occur very rapidly in the personality of an adolescent and leads him into a new world. Adolescence is a critical link between childhood and adulthood, characterized by significant physical, psychological, and social transitions. These transitions carry new risks but also present opportunities to positively influence the immediate and future health of young people.

Adolescence is a period in the life cycle of human beings where in one confronts with tantalizing and restrictive situations, so curiously paternal into a form which allows a scope for analytical study. The parents have to deal with adolescents in homes and the teachers in schools. It is not the parents and the teachers alone who happen to meet the adolescents but others also has to face the strange behaviour of adolescents in restaurants, theaters, fields, fairs, cross-roads and other public places. Most of us are, therefore, supposed to be acquainted with the general nature of adolescence.

Bhatia, K. T., (1984), has studied the Emotional, Personal and Social Problems of Adjustment of Adolescents under Indian Conditions with Special Reference to Values of Life. Objectives of this study were to inquire into the social and personal background of the junior and senior college-going students of Greater Bombay and the nature of problems faced by adolescents, of both sexes, in their inter-personal relationships in the college and the attitudes of adolescents towards their country. Study found that adolescents were sometimes treated like adults and sometimes like children, the girls were more liable to be treated like children and were not granted the freedom of thought and behavior. Girls were not permitted to stay out late by their parents, a large majority of the boys and girls preferred to
have friends of the opposite sex, boys seemed to receive more pocket-money than girls, large majority expressed the desire to have marriage by choice and adolescents were hesitant to favour sex instruction in schools.

Desai, J. J., (1986), has studied the Attitude of the School going Adolescent towards Physical Education Programme in the School with Reference to Personality Characteristics and found that sex did not differ significantly in their attitude towards physical education, secondary school students do not differ significantly in their attitude towards physical education, the students from urban areas are significantly better in developing the attitude towards physical education than those from the rural areas, there is a significant relationship between personality factors and attitude towards physical education, the parents’ interest in sports and games does not play an important role in developing the attitude towards physical education, the body built has not concern with the attitude towards physical education.

Gyanani, T. C., (1998), has studied Problems of First – generation Adolescent Learners. Adolescents have various problems, one of them being that of maladjustment. The family and its educational environment are among the factors creating problems for adolescents. Society is not able to catch up with a constructive aspect and its traditions have brought about a conflict of values and created frustration among many serious problems. Problems like ill health, lack of finances, violence etc. are faced by adolescents. In India the first generation learners have problems like the other disadvantaged groups. This is one disadvantaged groups of Indian society. Literate parents’ explosion of population, religious rigidity, poor echo remote village areas and sex discrimination in traditional and orthodox village societies are the major factor affect the development of first generation learners. Various research studies reveal that home background and cognition variables have been unfavourable to first generation learners. The contribution of the father’s educational background was more important than the more problems of first generation learners. There are very few studies found that the first-generation learners expressed their prior problem to be related to finance. The recreation and social problem is also expressed by first generation learners, but it is in second priority. They were very careless, lazy, depressed and unable to take decisions, groups suffered from frustration and feelings of inferiority. First -generation learners are equally burdened with Vocational and Educational problem. In order of priority, these problems were worried about their future careers and had a problem availing properly appropriate subjects for higher education as well as for a suitable job. The first generation learners were not very conscious about moral and religious implications.

Zachariah, S., (1982), has studied the Fantasy Life of Adolescent Girls and its Influence on Educational Achievement and found that educational fantasies occupied the highest rank in terms of frequency of occurrence with social fantasies getting the second rank. Intelligence and personality decreased the negative relationship between the fantasy life and educational achievement. The relationship between fantasy life and educational achievement was negative for all the subjects and for most of fantasy life.

Vachhrajani, Bhadrayu Vinayak, (1988), has studied the Impact of Self Instructional Material on Sex Education Adolescent, Neuroticism and Attitude towards Sex of High School Students and found that self-instructional material on sex education had positive effect on the neuroticism of girls of std. X and std. XII of urban and rural area, where as it had no affect on the neuroticism of boys of std. X and std. XII of urban area and std. X of rural area. The self-instructional material on sex education had positive effect on the attitude towards sex of boys and girls of std. X and std. XII of urban and rural area.

George, K. V., (1991), has studied the Sex-Related Problems of Adolescents in the College of Kerala and their Perception of Sex Education and found that while the social problems experienced by the boys and girls were similar, the physical, physiological and psychological problems were different; the profile analysis of variance of sex-related problems was significant for boys and girls, friends appeared
to be the primary source of information concerning sex and parents were found to be the least preferred and adolescents had a good number of superstitious beliefs about sex.

2. Objective

1. To Study the Effect of Adolescence education programme on Adolescence awareness of Adolescence.
2. To Study the Effect of Age on Adolescence awareness of Adolescence.
3. To Study the Effect of Sex on Adolescence awareness of Adolescence.
4. To Study Interaction Effect of Adolescence education programme and Age on Adolescence awareness of Adolescence.
5. To Study Interaction Effect of Adolescence education programme and Sex on Adolescence awareness of Adolescence.
6. To Study Interaction Effect of Age and Sex on Adolescence awareness of Adolescence.

3. Hypotheses

H01: There will be no significant difference between mean score of Adolescence awareness of Adolescence Education Programme group and Control group students.
H02: There will be no significant difference between mean score of Adolescence awareness of Pre Adolescent and Adolescent Students.
H03: There will be no significant difference between mean score of Adolescence awareness of Boys and Girls Students.
H04: There will be no significant interaction Effect of Adolescence Education Programme and Age on Adolescence awareness of Adolescents.
H05: There will be no significant interaction Effect of Adolescence Education Programme and Sex on Adolescence awareness of Adolescents.
H06: There will be no significant interaction Effect of Age and Sex on Adolescence Awareness of Adolescents.
H07: There will be no significant interaction Effect of Adolescence Education Programme, Age and Sex on Adolescence awareness of Adolescents.

4. Population and Sample

Population of the present study was the students of pre-adolescence and adolescence age of Anand district of Gujarat State. Sample of the present study was selected using purposive sampling method according to the variables of the study. Sample of the study was selected two schools out of which two classes of each school of std. 8 and std.10. Total sample of the study was 320 students of secondary schools, in which 160 for experimental group and 160 for control group.

5. Tools

5.1 Scale
Adolescence awareness Scale was constructed by the researcher. For the construction of the Scale, researcher has kept in mind the components of Adolescence awareness such as personal adjustment, classroom problem, physical development of adolescent, homo-hetero relationship, home problem and social problem. Test-retest reliability was found 0.90 and the split-half reliability was found 0.81. Construct validity of the Adolescence awareness Scale was established and found ranged from 0.30 to 0.77. Usability of the present scale was decided in relation to administration of the scale, time required, scoring method etc.

5.2 Adolescence Education Programme
Adolescence education programme was developed by the researcher. As the study is focused on the field of adolescent education it was necessary for the researcher to delimit the aspects of adolescence
development to be involved in the present study. Adolescence awareness can be enhanced only through programme. The aspects of the programme components were Personal Adjustment, Classroom Problem, Physical Development, Homo-hetero Relation, Home Problem and Social Problem. Keeping in mind, the main six aspects of adolescence education programme was prepared by the researcher.

6. Experiment Design
Researcher has selected three independent variables for the present study is adolescence education programme, age and sex. To study the effectiveness of Adolescence education programme a sample of 320 secondary school students of Anand district was selected according to the variables of the study. In each school participants were assigned randomly in experiment and control group. Experiment group was given an adolescence education programme and Control group was not given any treatment. Researcher has decided to study the main effect of each independent variable on adolescence awareness and the interaction effect of them. So, researcher has selected 2 x 2 x 2 factorial design for the experiment.

7. Analyses of Data
After the experimental treatment adolescence awareness scale was administered in both the groups and scores of adolescence awareness were collected. After collecting the data, it was analyzed by using ANOVA 2 x 2 x 2 factorial design and hypotheses were tested.

8. Results
Results of the present study are given below:

Table 1: Mean for two levels of main variables

<table>
<thead>
<tr>
<th>Source</th>
<th>Variable</th>
<th>Levels</th>
<th>Mean</th>
<th>Mean difference</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>AEP</td>
<td>Experiment</td>
<td>192.93</td>
<td>58.61</td>
<td>15.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Control</td>
<td>134.32</td>
<td></td>
<td>24.47</td>
</tr>
<tr>
<td>B</td>
<td>Age</td>
<td>Pre-adolescent</td>
<td>150.78</td>
<td>25.70</td>
<td>40.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adolescent</td>
<td>176.48</td>
<td></td>
<td>24.99</td>
</tr>
<tr>
<td>C</td>
<td>Sex</td>
<td>Boys</td>
<td>168.73</td>
<td>10.21</td>
<td>36.07</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Girls</td>
<td>158.52</td>
<td></td>
<td>34.72</td>
</tr>
</tbody>
</table>

Table 2: ANOVA Summary For (2 X 2 X 2) Factorial Analysis

<table>
<thead>
<tr>
<th>Sr.</th>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AEP</td>
<td>274834.01</td>
<td>1</td>
<td>274834.01</td>
<td>2173.924</td>
<td>0.000*</td>
</tr>
<tr>
<td>2</td>
<td>Age</td>
<td>52839.20</td>
<td>1</td>
<td>52839.20</td>
<td>417.956</td>
<td>0.000**</td>
</tr>
<tr>
<td>3</td>
<td>Sex</td>
<td>8343.61</td>
<td>1</td>
<td>8343.61</td>
<td>65.998</td>
<td>0.000**</td>
</tr>
<tr>
<td>4</td>
<td>AEP *Age</td>
<td>19782.05</td>
<td>1</td>
<td>19782.05</td>
<td>156.457</td>
<td>0.000**</td>
</tr>
<tr>
<td>5</td>
<td>AEP *Sex</td>
<td>465.61</td>
<td>1</td>
<td>465.61</td>
<td>3.683</td>
<td>0.056@</td>
</tr>
<tr>
<td>6</td>
<td>Age*Sex</td>
<td>490.05</td>
<td>1</td>
<td>490.05</td>
<td>3.876</td>
<td>0.05*</td>
</tr>
<tr>
<td>7</td>
<td>AEP <em>Age</em>Sex</td>
<td>16.20</td>
<td>1</td>
<td>16.20</td>
<td>0.128</td>
<td>0.721@</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>50271.73</td>
<td>312</td>
<td>161.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>407042.48</td>
<td>319</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at 0.01 Level of Confidence,  * Significant at 0.05 Level of Confidence
@ No Significant at any Level of Confidence

1. Experiment and Control group, Results of ANOVA given in Table: 1, show that obtained F-ratio is 2173.92 (df 1/312), which is significant at 0.01 level of confidence. The mean score of Adolescence education programme Group is 192.93 and that of Control Group is 134.32. Mean score of Adolescence awareness of Adolescence education programme Group is significantly
higher than that of Control Group. Significant difference in mean score shows significant effect of Adolescence education programme on Adolescence Awareness.

2. To study the significant difference between the mean score of Adolescence awareness of Pre-adolescent and Adolescent Students;

Results of ANOVA given in Table: 1, show that obtained, F-ratio is 417.956 (df 1/312), which is significant at 0.01 level of confidence. The mean score of Pre Adolescent Students is 150.78 and that of Adolescent Students is 176.48. Mean score of Adolescence awareness of Adolescent Students is significantly higher than that of Pre Adolescent Students.

3. To study the significance difference between the mean score of Adolescence awareness of Boys and Girls Adolescence Students;

Results of ANOVA given in Table: 1, show that obtained F-ratio is 65.998, which is significant at 0.01 level of confidence. The mean score of Boys student is 168.73 and that of Girls student is 158.52. Mean score of Adolescence awareness of Boys student is significantly higher than that of Girls student.

4. To study the significant interaction effect of Treatment and Age on the mean score of Adolescence awareness of Adolescents.

Results of ANOVA given in Table: 1, show that obtained F-ratio of interaction effect is 156.457, which is significant at 0.01 level of confidence. Mean and SD of Adolescence awareness Scores of AEP and Age are given below in Table: 2.

| Table 3: Mean And S.D. of Adolescence Awareness of Age & AEP |
|---------------------|-----------------|-----------------|-----------------|-----------------|
|                     |                   | Experiment      | Control         |
| Age                |                   | 80              | 80              |
| Pre-adolescent     | N                 | 187.95          | 113.61          |
|                    | M                 | 14.17           | 15.07           |
| Adolescent         | N                 | 80              | 80              |
|                    | M                 | 197.92          | 155.03          |
|                    | SD                | 14.70           | 10.48           |

To study the difference between the groups, mean score of Adolescence awareness in relation to Treatment and Age and t-ratio were computed and results are shown below in Table 3.

<table>
<thead>
<tr>
<th>Table 4: Differences between Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistics</td>
</tr>
<tr>
<td>Experiment Pre-adolescent</td>
</tr>
<tr>
<td>Experiment Adolescent</td>
</tr>
<tr>
<td>Control Pre-adolescent</td>
</tr>
</tbody>
</table>

** = significant at 0.01 level of confidence

From the Table 2 and 3, it can be observed that,

- Obtained t-ratio of difference between mean score of Experiment Pre-adolescent and Experiment Adolescent is 4.37, which is significant at 0.01 level of confidence. Mean score of Adolescence awareness of Experiment Pre-adolescent is 187.95 and that of Experiment Adolescent is 197.92. Mean score of Adolescence awareness of Experiment Adolescent is significantly higher than that of Experiment Pre-adolescent.

- Obtained t-ratio of difference between mean score of Experiment Pre-adolescent and Control Pre-adolescent is 32.18, which is significant at 0.01 level of confidence. Mean score of Adolescence awareness of Experiment Pre-adolescent is 187.95 and that of Control Pre-adolescent is 113.61.
Mean score of Adolescence awareness of Experiment Pre-adolescent is significantly higher than that of Control Pre-adolescent.

- Obtained t-ratio of difference between mean score of Experiment Pre-adolescent and Control Adolescent is 16.71, which is significant at 0.01 level of confidence. Mean score of Adolescence awareness of Experiment Pre-adolescent is 187.95 and that of Control Adolescent is 155.03. Mean score of Adolescence awareness of Experiment Pre-adolescent is significantly higher than that of Control Adolescent.

- Obtained t-ratio of difference between mean score of Experiment Adolescent and Control Pre-adolescent is 35.89, which is significant at 0.01 level of confidence. Mean score of Adolescence awareness of Experiment Adolescent is 197.92 and that of Control Pre-adolescent is 113.61. Mean score of Adolescence awareness of Experiment Adolescent is significantly higher than that of Control Pre-adolescent.

- Obtained t-ratio of difference between mean score of Control Pre-adolescent and Control Adolescent is 21.23, which is significant at 0.01 level of confidence. Mean score of Adolescence awareness of Control Pre-adolescent is 113.61 and that of Control Adolescent is 155.03. Mean score of Adolescence awareness of Control Adolescent is significantly higher than that of Control Pre-adolescent.

5. To study the significant interaction effect of Adolescence education programme and Sex on the mean score of Adolescence awareness of Adolescents.

Results of ANOVA given in Table: 1, show that obtained F-ratio of interaction effect is 3.683, which is not significant at any level of confidence.

6. To study the significant interaction effect of Age and Sex on the mean score of Adolescence awareness of Adolescents.

Results of ANOVA given in Table: 1, show that obtained F-ratio of interaction effect is 3.876, which is significant at 0.05 level of confidence.

To study the difference between the groups, mean score of Adolescence awareness in relation to Age and Sex and results are shown below in Table: 4.

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Pre-adolescent Boys</th>
<th>Pre-adolescent Girls</th>
<th>Adolescent Boys</th>
<th>Adolescent Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-adolescent</td>
<td>2.02</td>
<td>4.29</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Boys</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-adolescent</td>
<td></td>
<td></td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Girls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent Boys</td>
<td></td>
<td></td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>Adolescent Girls</td>
<td></td>
<td></td>
<td></td>
<td>**</td>
</tr>
</tbody>
</table>

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

From the Table 4, it can be observed that,

1. Obtained difference between mean score of Pre-adolescent Boys and Pre-adolescent Girls is 2.02, which is significant at 0.05 level of confidence. Mean score of Adolescence awareness of Pre-adolescent Boys is 157.12 and that of Pre-adolescent Girls is 144.43. Mean score of Adolescence awareness of Pre-adolescent Boys is significantly higher than that of Pre-adolescent Girls.

2. Obtained difference between mean score of Pre-adolescent Boys and Adolescent Boys is 4.29, which is significant at 0.01 level of confidence. Mean score of Adolescence awareness of Pre-adolescent Boys
Boys is 157.12 and that of Adolescent Boys is 180.35. Mean score of Adolescence awareness of Adolescent Boys is significantly higher than that of Pre-adolescent Boys.

3. Obtained difference between mean score of Pre-adolescent Boys and Adolescent Girls is 2.96, which is significant at 0.01 level of confidence. Mean score of Adolescence awareness of Pre-adolescent Boys is 157.12 and that of Adolescent Girls is 172.61. Mean score of Adolescence awareness of Adolescent Girls is significantly higher than that of Pre-adolescent Boys.

4. Obtained difference between mean score of Pre-adolescent Girls and Adolescent Boys is 6.87, which is significant at 0.01 level of confidence. Mean score of Adolescence awareness of Pre-adolescent Girls is 144.43 and that of Adolescent Boys is 180.35. Mean score of Adolescence awareness of Adolescent Boys is significantly higher than that of Pre-adolescent Girls.

5. Obtained t-ratio of difference between mean score of Pre-adolescent Girls and Adolescent Girls is 5.60, which is significant at 0.01 level of confidence. Mean score of Adolescence awareness of Pre-adolescent Girls is 144.43 and that of Adolescent Girls is 172.61. Mean score of Adolescence awareness of Adolescent Girls is significantly higher than that of Pre-adolescent Girls.

6. Obtained difference between mean score of Adolescent Boys and Adolescent Girls is 1.97, which is significant at 0.05 level of confidence. Mean score of Adolescence awareness of Adolescent Boys is 180.35 and that of Adolescent Girls is 172.61. Mean score of Adolescence awareness of Adolescent Boys is significantly higher than that of Adolescent Girls.

7. To study the significant interaction effect of Treatment, Age and Sex on the mean score of Adolescence awareness of Adolescents.

Results of ANOVA given in Table: 1, show that obtained F-ratio of interaction effect is 0.128, which is not significant at any level of confidence.

9. Findings

- There is significant effect of age on adolescence awareness of adolescents. Mean score of adolescent students is significantly higher than that of pre-adolescent students.
- There is significant effect of sex on adolescence awareness of adolescents. Mean score of boys is significantly higher than that of girls.
- There is significant effect of adolescence education programme on adolescence awareness of adolescents. Mean score of adolescence education programme group is significantly higher than that of control group.
- There is significant interaction effect of age and Sex on the Mean score of Adolescence awareness of Adolescents.
- There is significant interaction effect of age and adolescence education programme on the Mean score of adolescence awareness of adolescents.
- There is no significant interaction effect of Sex and adolescence education programme on the Mean score of Adolescence awareness of Adolescents.
- There is no significant interaction effect of adolescence education programme, age and sex on the Mean score of Adolescence awareness of Adolescents.
- Mean score of adolescence awareness of Pre-adolescent Boys is significant higher than that of Pre-adolescent Girls.
- Mean score of adolescence awareness of Adolescent Boys is significant higher than that of Pre-adolescent Boys.
- Mean score of adolescence awareness of Adolescent Girls is significant higher than that of Pre-adolescent Boys.
- Mean score of adolescence awareness of Adolescent Boys is significant higher than that of Pre-adolescent Girls.
Mean score of adolescence awareness of Adolescent Boys is significant higher than that of Adolescent Girls.

Mean score of adolescence awareness of adolescence education programme Adolescent is significant higher than that of adolescence education programme Pre-adolescent.

Mean score of adolescence awareness of adolescence education programme Pre-adolescent is significant higher than that of Control Pre-adolescent.

Mean score of adolescence awareness of adolescence education programme Pre-adolescent is significant higher than that of Control Adolescent.

Mean score of adolescence awareness of adolescence education programme Adolescent is significant higher than that of Control Pre-adolescent.

Adolescence awareness Programme shows highest effect on Adolescent Boys and lowest effect on Pre-adolescent Girls.

There is a significant difference between the mean score of all the groups.

10. Conclusion

The present study opens up a new horizon in the area of research on adolescent education. The study marks a step ahead in the field of adolescent education especially, in the area of adolescence awareness of the adolescents. It is so essential to keep in mind, in the field of education to give some new approaches of teaching and learning. In such a challenging ground the enhancement of the adolescence awareness of school students may be useful to solve the challenges and problems regarding adolescence. It is our first and foremost duty to prepare such programme to enhance the adolescence awareness and to find out its effect through varied research work.

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