A COMPARATIVE STUDY OF OVERT AGGRESSION & MORAL JUDGEMENT IN RELATION TO AGE AMONG CARTOON WATCHERS & NON-CARTOON WATCHER STUDENTS.

Smita Ghosh
PHD Scholar
Sabarmati University
Ahmedabad

Guide: Prof Dr.Dinesh Panchal
Co-Guide : Prof Dr Prachi Shah

Abstract
The study aims at examining the viewing pattern of children with an eye on the influence of the cartoons as exhibited in their imitation of what they watch. A total of 120 children from grade 4th and 7th were selected as sample from Ahmedabad, Gujarat. Data were collected with the help of the standardized tool "Moral Judgement Test" and Overt Aggression Test. The study concluded cognitive maturity is closely related to mature moral judgement. Definite shifts in moral judgement was found with increase in chronological age. This study also suggested that there was a correlation between exposure to cartoons and perceived behaviour and aggression.

Keywords: Cartoons, Overt Aggression, Moral Judgement, Cartoon Watchers, Primary School, Middle School.

INTRODUCTION
After the first half of the 20th century, television widely spread to the world. In communication and media studies, the influence of media violence and aggression on children has been widely scrutinized (American Academy Of Pediatrics, 2001). With the development of technology, animation gained popularity and its target was the children. In time, some researchers proved that cartoon in television influences children. The present study seeks to investigate to what extent do the cartoons influence and lead to aggression and lack of moral judgement. Children are often considered to be the closest reflection of the omnipotent creator of the world. Innocence and purity personified, they are unmarred by the corrupt thoughts and practices. They resemble wet clay, enthusiastic and ever ready to be shaped in the manner the potter wants to mould them. TV Cartoons and animated movies are the most entertaining activity for the kids for over more than 80 years. Felix the Cat was the first ever cartoon icon, which started its journey in 1920s. In the next 10 years, Donald Duck, Mickey Mouse and Pluto were the cartoon character which is being introduced by Disney Brother’s cartoon studios (Box Office Mojo.com, 2004). Cartoons are playing a vital role in the changing behaviour of the growing children. School going children entertain themselves by watching cartoons in spite of playing physical games. They involve themselves more and behave like the hero’s of these cartoons. Kids adopt their way of talking, walking, dressing and eating. "Cartoon network started its transmission in 1992, and gained record breaking popularity. Ben Ten and Doreamon are the most favourite cartoons of the school going children’s. Since August 2002, it has been watched in more than 80 million homes in the United States of America and in 145 countries through the world” (Hassan and Daniyal, 2013). Violence showed in the cartoons is spoiling the minds of school going children; they always use guns, swords and rods during playing games. It is noticed that cartoon content is full of violence than serials, plays and comedies” (Potter and Warren, 1998). "As the result, children are more exposed to violence showed in the cartoon program than any other television program broadcasted during prime time i.e. 8pm to 11pm” (Gerbner, Gross, Morgan and Signorelli, 1994)

REVIEW OF LITERATURE
Relational and Overt Aggression in Middle Childhood: A Comparison of Hypothetical and Reported Conflicts
Following recent research patterns in childhood conflict, the current study examined individual differences and gender trends in conflict resolution styles. Relational and overt aggression were investigated in 31 fourth and fifth graders by use of a multi-method evaluation that included peer and teacher ratings, and hypothetical
conflict vignettes and reported conflicts. It was hypothesized that girls would use relational aggression more often than boys and that boys would display overt aggression more often than girls. Teacher and peer measures were convergent in corresponding ratings of overt aggression, but no convergence was apparent for either overt or relational aggression between hypothetical and reported conflicts of both aggressive resolution strategies. Gender differences in relational aggression emerged in reported conflicts. Large effect sizes were computed for many of the tests of gender differences (overt: peer ratings, teacher ratings, reported conflicts; relational: reported conflicts).

A STUDY ON MORAL JUDGMENT ABILITY OF TEENAGERS (14-19 YEAR)

Moral judgment involves a cognitive capacity to define situation in terms of right and duties. Pre-adolescent can see themselves better from other people’s view and thus develop awareness for moral issues. The sample consisted of 300 children, 150 of which were in the age group of 14-16 years and 150 in the age group of 17-19 years. Sex ratio was also maintained. Moral judgment was measured by Moral judgment Test developed by Meera Verma and Durga Nand Sinha. Results revealed a significant difference in the moral judgment ability between two groups with older children (17-19 years) scoring higher than younger ones (14-17 years), which suggested that maturity is a necessary (though not sufficient) condition for development of moral judgment ability.

A Study on Moral Judgement Ability of Pre-adolescent Children (9-11 Year) of Public Schools.
The present study was carried out to study the moral judgment ability of pre-adolescent (9-11 years) of public school of Yamuna nagar. Moral judgment involves a cognitive capacity to define situation in terms of right and duties. Pre-adolescent can see themselves better from other people’s view and thus develop awareness for moral issues. The sample consisted of 200 children, 100 of which were in the age group of 8-9 years and 100 in the age group of 10-11 years. Sex ratio was also maintained. Moral judgment was measured by Moral judgment Test developed by Meera Verma and Durga Nand Sinha. Results revealed a significant difference in the moral judgment ability between two groups with older children (10-11 years) scoring higher than younger ones (8-9 years) suggested that maturity is a necessary (through not sufficient) condition for development of moral judgment ability.

Cartoon Network and its Impact on Behaviour of School Going Children
The objective of this study is to trace the impact on the behaviour of the children after watching cartoon programs. Cartoon network is one of the most favourite cartoon channels for children. As cartoon network is 24 hours channel, so children spend most of their leisure time in front of it. It not only attracts the children through its contents but also inculcates some positive and negative habits in them. One of the main factors which influence the children while watching cartoons is violence. Violence is a vital part of most of the cartoon programs. Children are induced and attracted by violent content by broadcasters. The study design is survey research and nonparametric statistics is used for data analysis. This study explores the impact of violence presented in cartoons on children behaviour. They not only imitate their favourite cartoon characters but even force their parents to buy the same costumes or accessories as displayed by different cartoon characters. This study also depicts this fact that the behaviour of the children in class is influenced by watching different cartoon programs. The purpose of this study is to see the impact on the behaviour of the children after watching cartoon programs. Our study revealed two facts that (i) there exists strong association between watching cartoon programs and the behaviour of the children in class and (ii) the violence present in the cartoons has strong association with the behaviour of the children.

SIGNIFICANCE OF THE STUDY

Children are voracious and unselective viewers of television who spend a considerable part of their free time in front of television sets.
Have you ever met any children who do not like cartoons?
Or have you ever seen any children who refuse to watch cartoon?
These situations are mostly impossible under normal circumstances. It’s obvious that today’s children are, mostly unconsciously, exposed to television.

MOTIVATION FOR THE STUDY

Violence is becoming widespread across different regions of the world. It is also increasingly cutting across different ages and genders. Humans are influenced by the 3 media content they consume and they often re-enact the actions seen or heard in the media (Gerbner, 1977). Children learn faster than adults, and their re-enactment of media messages is unrivalled. Since most children programmes are presented in entertainment form especially in the format of cartoons, it is important to measure the amount of influence these cartoons have on children. Consequently, this study is motivated by children’s reaction to the violent contents of the
programme they watch. The number of things shown on television as cartoons, and other media contents, have a way of influencing the behaviours of children. The cartoons such as (Ben10, Tom and Jerry, Sumarai x, Teenage Mutant Ninja Turtles), they send numerous negative signal. Lots of imagination go into their brains and they become more violent and aggressive. George Gerbner (1986) states that “when one is exposed to too much of television one begins to see it as our reality”. So children see the media contents they are exposed to as the reality of life and they often go on to emulate or replicate these realities. Children do not perceive what they see on television in the same way that adults do and understand. Although not all what they view influence them negatively, some of the media contents offer powerful tools for learning and entertainment which build them up mentally and socially. Due to their age, they think what they see as reality.

**CARTOON TIME IN OUR CHILDREN’S SCHEDULE**

In a research performed by the researcher Kayla Bois & Brad Bushman “Michigan University”, they summed up the cartoon content in our Children Schedules as follows:
- **2 - 5 years old children watch cartoon 32 hrs. Weekly.**
- **6 - 11 years old children watch cartoon 28 hrs. Weekly. And they stated that:**
  - 71% of 8 - 18 years old has a TV in their rooms.
  - 53% of 7 - 12 years old has no parental monitoring for what being watched on TV.
  - 51% of homes: TV is switched on most of time. Another research performed by researcher Sharmin "BRAC University", concluded:
  - Most parents prefer to leave their children in front of TV in order to finish their Work or to have a rest.
  - Putting a child in front of the TV is the best way for a parent to make their child eat their food.

**OBJECTIVES**

1. To find the Overt Aggression level of Cartoon Watcher Students between 1st to 7th grade (6-12 Years)
2. To find the Overt Aggression level of Non-Cartoon Watcher students between 1st to 7th grade (6-12 Years)
3. To find the Moral Judgement ability of Cartoon Watcher students between 1st to 7th grade (6-12 Years)
4. To find the Moral Judgement ability of Non-Cartoon Watcher students between 1st to 7th grade (7-12 Years)
5. To analyse the factors that influences the children to see cartoon programs.
6. To suggest better ways and means to modify the behaviour of cartoon watcher students.

**HYPOTHESYS**

Ho1: There is no significant difference in Overt Aggression level of Cartoon Watcher students and Non-Cartoon Watcher students.

Ho2: There is no significant difference in age of Cartoon Watcher students on Overt Aggression level.

Ho3: There is no significant difference in age of Non-Cartoon Watcher students on Overt Aggression level.

Ho4: There is no significant difference in Moral Judgement ability of Cartoon Watcher students and Non-Cartoon Watcher students.

Ho5: There is no significant difference in age of Cartoon Watcher students on Moral Judgement ability.

Ho6: There is no significant difference in age of Non-Cartoon Watcher students on Moral Judgement ability.

**CRITERIA FOR CARTOON WATCHERS & NON-CARTOON WATCHERS**

**Criteria of Cartoon Watchers**
- Children watching 2 or more than 2 of the below mentioned cartoons of Hungama, POGO and Cartoon Network daily.

**Criteria of Non-Cartoon Watchers**
- Children watching less than 2 cartoons or no cartoons at all.

**Criteria of Students Age**
- 6-9 Years (Students between 1st to 4th Grade)
- 10-12 Years (Students between 5th to 7th Grade)
The following facts are based on the TRP rating received from TAM India:

(TAM India: Television Audience Measurement)

### TOP UNIQUE PROGRAMMES FOR POGO ACROSS YEARS

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROG TITLE</td>
<td>TV</td>
<td>PROG TITLE</td>
<td>TV</td>
</tr>
<tr>
<td>LCP-CHHOTA BHEEM AND THE CURSE OF DAMYAA</td>
<td>1.</td>
<td>LCP-CHHOTA BHEEM</td>
<td>1.</td>
</tr>
<tr>
<td>CHHOTA BHEEM</td>
<td>1.</td>
<td>CHHOTA BHEEM</td>
<td>1.</td>
</tr>
<tr>
<td>MR.BEAN THE ANIMATED SER</td>
<td>1.</td>
<td>CHHOTA BHEEM (HINDI)</td>
<td>1.</td>
</tr>
<tr>
<td>LCP-MAHARAJ KI JAI</td>
<td>1.</td>
<td>LCP-BHEEM AUR SALMAN KI KICK</td>
<td>1.</td>
</tr>
<tr>
<td>LCP-CHHOTA BHEEM THE CROWN OF VALHALLA</td>
<td>1.</td>
<td>LCP-MIGHTY RAJU RIO CALLING</td>
<td>1.</td>
</tr>
</tbody>
</table>

**SOURCE:** TAM PEOPLEMETER SYSTEM  
**MARKET:** ALL INDIA  
**TG:** CS 4-14  
**PERIOD:** YR 2013-15

### TOP UNIQUE PROGRAMMES FOR HUNGAMA ACROSS YEARS

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROG TITLE</td>
<td>TV</td>
<td>PROG TITLE</td>
<td>TVR</td>
</tr>
<tr>
<td>HFF SHINCHAN MOVIE VILLAIN AUR DULHAN</td>
<td>1.</td>
<td>POKEMON</td>
<td>1.9</td>
</tr>
<tr>
<td>HFF CHHOTA BHEEM AND THE THRONE OF BALI</td>
<td>1.</td>
<td>HFF SHINCHAN MASALA STORY</td>
<td>1.7</td>
</tr>
<tr>
<td>HFF SHINCHAN MOVIE THE SPY</td>
<td>1.</td>
<td>HFF SHINCHAN MOVIE HIMAVARI BANEGI RAJKU</td>
<td>1.5</td>
</tr>
<tr>
<td>DORAEMON</td>
<td>1.</td>
<td>VIR-THE BOBOT BOY</td>
<td>1.4</td>
</tr>
<tr>
<td>HFF STUART LITTLE</td>
<td>1.</td>
<td>DORAEMON</td>
<td>1.4</td>
</tr>
</tbody>
</table>

**SOURCE:** TAM PEOPLEMETER SYSTEM  
**MARKET:** ALL INDIA  
**TG:** CS 4-14  
**PERIOD:** YR 2013-15

### METHODOLOGY

**SAMPLE AND SOURCE OF SAMPLE**

The data was collected from different school students of Ahmedabad-Gujarat.

**SAMPLE SIZE**

Total 120 Students  
Primary School Students (4th Grade) – 60 Students  
Middle School Students (7th Grade) – 60 Students  

The samples were selected by Simple Random Sampling (SRS).

**VARIABLES**

Independent Variables  
1. Cartoon Programs  
   a. Cartoon Watchers  
   b. Non Cartoon Watchers
2. **Age**
   a. Primary School Students (6-9 years) 1st - 4th Grade
   b. Middle School Students (10-12 Years) 5th – 7th Grade

**Dependent Variable**
1. Overt Aggression
2. Moral Judgement

### RESEARCH DESIGN

**A 2 x 2 factorial design**

<table>
<thead>
<tr>
<th>School Students (120)</th>
<th>Cartoon Watchers (60)</th>
<th>Non-Cartoon Watchers (60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (8-9 Years) (4th Grade) (30)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (11-12 Years) (7th Grade) (30)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table showing Research Design for the study:**

<table>
<thead>
<tr>
<th>Cartoon Programs</th>
<th>8-9 Years (4th Grade)</th>
<th>11-12 Years (7th Grade)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartoon Watcher</td>
<td>30</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Non-Cartoon Watcher</td>
<td>30</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>60</td>
<td>120</td>
</tr>
</tbody>
</table>

### QUESTIONNAIRE/TOOLS USED

The following tools have been used to collect the data:

1. **Moral Judgement Test (MJT–SV)**

**About the Author**
This test is constructed & standardized by Meera Verma & Durganand Sinha.

**About the Moral Judgement Test**
The Test consists of 50 items into 6 Dimension/Parts Like.
1. Discrimination
2. Incomplete Sentence
3. Analogies
4. Best Moral Answer
5. Moral Reasoning
6. Definition
It is meant for children of both sexes from 6 to 12 years.

Scoring Procedure
Moral Judgement Test contains 50 items. Each item has optional response. The respondent has to select one option out of the given responses.

Reliability & Validity
The split-half reliability of the test for the three age groups 6-7 years, 8-9 years and 10-11 years is 0.82, 0.81 and 0.86 respectively.

2. Overt Aggression Test (OAT–VG)

About the Author
This test is constructed & standardized by Preeti Vohra and R. K. Gupta.

About the Overt Aggression Test
The overt aggression test is a test which comprises of two tests—
a. Self Assessment Test for overt aggression is to be filled by the child 40 items.
b. A Behaviour Checklist consisting of the opinion of the teacher and parents in relation to the Child’s Behaviour 8 items.

Reliability & Validity
It was administered on students of class IV to VI age range 8 to 11 years.

STATISTICAL ANALYSIS

The data was collected through distributing Overt Aggression Test and Moral Judgement Test questionnaire in English to the children in their free class. The behaviour check list to be filled by teachers was filled in the staff room during lunch break. The behaviour checklist (for Mothers) was given to them and explained (on parents teachers meet) at school. After collection, the whole data was compiled; tabled and appropriate statistical tests like Mean, SD and z score were applied to accomplish the objectives of the study.

RESULT AND DISCUSSION

Distribution of Respondents
Out of around 294 test papers that were distributed, 120 questionnaires were usable from. Rest were incomplete, in some cases parents had refused to co-operate.

Table 1: Distribution of Respondents according to their Grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Grade (Primary School – PS)</td>
<td>60</td>
</tr>
<tr>
<td>7th Grade (Middle School – MS)</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
</tr>
</tbody>
</table>

Table 2: Distribution of Respondents according to Cartoon watchers and Non Cartoon Watchers

<table>
<thead>
<tr>
<th>Grade</th>
<th>Cartoons</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Grade (Primary School – PS)</td>
<td>Cartoon Watchers</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Non-Cartoon Watchers</td>
<td>30</td>
</tr>
<tr>
<td>7th Grade (Middle School – MS)</td>
<td>Cartoon Watchers</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Non-Cartoon Watchers</td>
<td>30</td>
</tr>
</tbody>
</table>

Table 3. Cartoon Watchers and Non-Cartoon Watchers

<table>
<thead>
<tr>
<th>Cartoon Watchers (Boys)</th>
<th>Primary School</th>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Cartoon Watchers (Girls)</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Non-Cartoon Watchers (Boys)</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Non-Cartoon Watchers (Girls)</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>
Index:
PS: Primary School (1st to 4th Grade)
MS: Middle School (5th to 7th Grade)

Overt Aggression Test

Interpretation
- Extremely Aggressive
- High Aggression
- Above Average Aggression
- Average/Moderate Aggression
- Below Average Aggression
- Low Aggression
- No Aggression

**Table 1, 2 below shows the Level of Overt aggression in Cartoon Watchers and Non-Cartoon Watchers**

Table 1. Frequency distribution of respondents according to their Level of Overt Aggression

<table>
<thead>
<tr>
<th>Grade</th>
<th>Extremely Aggression</th>
<th>High Aggression</th>
<th>Above Average Aggression</th>
<th>Average/Moderate Aggression</th>
<th>Below Average Aggression</th>
<th>Low Aggression</th>
<th>No Aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>12</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>7th</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>11</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 2. Frequency distribution of respondents according to their Level of Overt Aggression

<table>
<thead>
<tr>
<th>Grade</th>
<th>Extremely Aggression</th>
<th>High Aggression</th>
<th>Above Average Aggression</th>
<th>Average/Moderate Aggression</th>
<th>Below Average Aggression</th>
<th>Low Aggression</th>
<th>No Aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>10</td>
<td>8</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7th</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>12</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Index:
PS – Primary School (1st to 4th Grade)
MS – Middle School (5th to 7th Grade)
CW – Cartoon Watchers
NCW – Non-Cartoon Watchers

**Descriptive Analysis of Question asked through a Personal Interview with Teachers and Mothers.**
(where Aggression level was above average)
**Ho1**: There is no significant difference in Overt Aggression level of Cartoon Watcher students and Non-Cartoon Watcher students.

**Comparison of Mean Scores of Cartoon Watchers and Non-Cartoon Watchers over their Level of Overt Aggression**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Category</th>
<th>Mean</th>
<th>SD</th>
<th>Z Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartoon Watchers</td>
<td>60</td>
<td>Above Average Aggression</td>
<td>27.6</td>
<td>5.3</td>
<td>*1.47</td>
</tr>
<tr>
<td>Non-Cartoon Watchers</td>
<td>60</td>
<td>Above Average Aggression</td>
<td>24.1</td>
<td>4.1</td>
<td></td>
</tr>
</tbody>
</table>

*Statistically Significant at .05 level of significance.

It is inferred from above Table that the mean scores for cartoon watchers was slightly higher than the mean scores for non-Cartoon Watchers. Thus, the null hypothesis-no.1, which states "There is no significant difference in Overt Aggression level of Cartoon Watcher students and Non-Cartoon Watcher students.,” was rejected.

**Ho2**: There is no significant difference in age of Cartoon Watcher students on Overt Aggression level.

**Table 2**

<table>
<thead>
<tr>
<th>Category</th>
<th>Level Category</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Z Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartoon Watchers</td>
<td>High Aggression Level</td>
<td>4th Grade</td>
<td>30</td>
<td>18.1</td>
<td>2.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7th Grade</td>
<td>30</td>
<td>21.3</td>
<td>3.1</td>
</tr>
</tbody>
</table>

*Statistically Significant at .05 level of significance.

It is inferred from above Table that the mean scores of cartoon watchers of 7th grade students were slightly higher than the mean scores for 4th grade students. Thus, the null hypothesis-no.2, which states "There is no significant difference in age of Cartoon Watcher students on Overt Aggression level." was rejected. It means that Overt Aggression level of Age/grade of Cartoon Watchers is different. Higher Aggression ability of subjects in the grade 7th, who are almost on the threshold of teenage, can be due to lack of supervision at home, lack of physical activity or any other reason.

**Ho3**: There is no significant difference in age of Non-Cartoon Watcher students on Overt Aggression level.

**Table 2**

<table>
<thead>
<tr>
<th>Category</th>
<th>Level Category</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Z Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Cartoon Watchers</td>
<td>High Aggression Level</td>
<td>4th Grade</td>
<td>30</td>
<td>14.2</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7th Grade</td>
<td>30</td>
<td>19.6</td>
<td>3.8</td>
</tr>
</tbody>
</table>

*Statistically Significant at .05 level of significance.

It is inferred from above Table that the mean scores of Non-cartoon watchers of 7th grade students were higher than the mean scores for 4th grade students. Thus, the null hypothesis-no.3, which states "There is no significant difference in age/grade of Non-Cartoon Watcher students on Overt Aggression level." was rejected.

**Moral Judgement Test**

**Interpretation**
- Very high ability of Moral Judgement
- High ability of Moral Judgement
- Average Ability of Moral Judgement
- Low Ability of Moral Judgement
- Very low ability of Moral Judgement

**Table 1** Frequency distribution of respondents according to their moral judgment ability - Cartoon Watchers

<table>
<thead>
<tr>
<th>Grade</th>
<th>Very High Ability</th>
<th>High Ability</th>
<th>Average Ability</th>
<th>Low Ability</th>
<th>Very Low Ability</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Grade</td>
<td>3</td>
<td>5</td>
<td>11</td>
<td>7</td>
<td>4</td>
<td>30</td>
</tr>
</tbody>
</table>
Table 2. Frequency distribution of respondents according to their moral judgment ability - Non-Cartoon Watchers

<table>
<thead>
<tr>
<th>Grade</th>
<th>Very High Ability</th>
<th>High Ability</th>
<th>Average Ability</th>
<th>Low Ability</th>
<th>Very Low Ability</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Grade</td>
<td>5</td>
<td>9</td>
<td>11</td>
<td>4</td>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>7th Grade</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>5</td>
<td>1</td>
<td>30</td>
</tr>
</tbody>
</table>

Moral Judgement Ability of PS (Primary School Students) between Cartoon Watchers and Non-Cartoon Watchers.

Index:
- PS – Primary School (1st to 4th Grade)
- CW – Cartoon Watchers
- NCW – Non-Cartoon Watchers

Moral Judgement Ability of MS (Middle School Students) between Cartoon Watchers and Non-Cartoon Watchers.
A close perusal of Table 1 & 2 reveals that maximum subjects in both the category i.e. Cartoon Watchers and Non-Cartoon Watchers for both the grades fall under ‘average’ category. This indicates that a greater number of children has the average ability to make moral judgment.

There were 3 and 4 subjects of 4th and 7th grade respectively in Cartoon watchers’ group in “Very High Ability” category whereas there were 5 and 7 subjects of 4th and 7th grade respectively in Non-Cartoon Watchers group in this category.

In the ‘High Ability’ category the number of subjects from Cartoon Watchers group was 5 and 6 subjects for 4th and 7th grade and 9 and 8 subjects of 4th and 7th grade in the Non-Cartoon watcher’s group.

In ‘very Low Ability’ category, the number of subjects from Cartoon Watchers was higher for both the grades in comparison to Non cartoon watchers.

**ANALYSIS OF THE DATA**

**Ho4:** There is no significant difference in Moral Judgement ability of Cartoon Watcher students and Non-Cartoon Watcher students.
Table 4 showing the mean and SD on Moral Judgment test

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Category</th>
<th>Z score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral Judgement of Cartoon Watchers</td>
<td>60</td>
<td>32.8</td>
<td>7.9</td>
<td>Average Ability of Moral Judgment</td>
<td>*2.1</td>
</tr>
<tr>
<td>Moral Judgement of Non Cartoon Watchers</td>
<td>60</td>
<td>25.8</td>
<td>5.5</td>
<td>Average Ability of Moral Judgment</td>
<td>*0.53</td>
</tr>
</tbody>
</table>

*Statistically significant at .01 and .05 probability level

It is clear from Table 4 that mean score of respondents in the Cartoon Watchers group was higher than the mean scores of respondents in the Non-Cartoon Watchers.

Thus, the null hypothesis no.4, which states “There is no significant difference in Moral Judgement ability of Cartoon Watcher students and Non-Cartoon Watcher students.” was rejected.

Ho5: There is no significant difference in age/grade of Cartoon Watcher students on Moral Judgement ability.

Table 5 showing the mean and SD on Moral Judgment test

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Category</th>
<th>Z score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral Judgement of Cartoon Watchers (4th Grade)</td>
<td>30</td>
<td>46.6</td>
<td>7.6</td>
<td>Very High Ability of Moral Judgment</td>
<td>*2.1</td>
</tr>
<tr>
<td>Moral Judgement of Cartoon Watchers (7th Grade)</td>
<td>30</td>
<td>34.4</td>
<td>5.1</td>
<td>Low Ability of Moral Judgment</td>
<td>*0.49</td>
</tr>
</tbody>
</table>

*Statistically significant at .01 and .05 probability level

It is clear from Table 5 that mean score of respondents in the 4th grade Cartoon Watchers group was higher than the mean scores of respondents in the 7th grade Cartoon Watchers.

Thus the null hypothesis no.5, which states “There is no significant difference in age/grade of Cartoon Watcher students on Moral Judgement ability.” was rejected. It means that age/grade of Cartoon Watchers effect moral judgement ability.

Ho6: There is no significant difference in age of Non-Cartoon Watcher students on Moral Judgement ability.

Table 6 showing the mean and SD on Moral Judgment test

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Category</th>
<th>Z score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral Judgement of Non-Cartoon Watchers (4th Grade)</td>
<td>30</td>
<td>27.4</td>
<td>5.1</td>
<td>Average Ability of Moral Judgment</td>
<td>*2.2</td>
</tr>
<tr>
<td>Moral Judgement of Non-Cartoon Watchers (7th Grade)</td>
<td>30</td>
<td>30.6</td>
<td>2.5</td>
<td>Average Ability of Moral Judgment</td>
<td>*0.57</td>
</tr>
</tbody>
</table>

*Statistically significant at .01 and .05 probability level

It is clear from Table 6 that mean score of respondents of the Non-Cartoon Watchers group of 7th Grade was higher than the mean scores of respondents in the 4th grade.

Thus, the null hypothesis no.6, which states “There is no significant difference in age of Non-Cartoon Watcher students on Moral Judgement ability.” was rejected.

**Test of association**

The chi-square test of association was used to measure the strength of relationship between the Moral Judgement of the children and the frequency they watch the cartoons. The study showed that the result is significant at 5% confidence level because p < 0.05. Chi-square result is shown in Table 1 below.

<table>
<thead>
<tr>
<th>Value</th>
<th>Degree of Freedom</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>6.75</td>
<td>2</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>6.93</td>
<td>2</td>
</tr>
</tbody>
</table>
The chi-square test of association was used to measure the strength of relationship between the Level of Overt Aggression of the children and the frequency they watch the cartoons. The study gave the significant result at $p < .05$, so we can conclude that the content present in the cartoons has strong association with the aggression level of the children.

**Table 1**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Degree of Freedom</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>6.22</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>120</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CONCLUSION**

Research Suggests:
- Overt Aggression level of Cartoon Watchers and Non-cartoon watchers was found to be different.
- Higher Aggression ability of subjects in the 7th grade, who are almost on the threshold of teenage, can be due to lack of supervision at home, lack of physical activity or any other reason.
- Overt aggression level of Non-Cartoon Watchers was more in case of higher grades, that means aggression is related to increase in age.
- It means that there is a difference in Moral Judgement ability of Cartoon Watcher students and Non-Cartoon Watcher Students.
- It means that age/grade of Cartoon Watchers effect moral judgement ability.
- Moral judgment ability of subjects in the age group 11-12 years (7th grade), who are almost on the threshold of adolescence, can be accounted to their ability to think rationally and understand other person's perspective which comes with increase in age.
- In the present study, though little association was seen between moral judgement and level of aggression. Children who had high level of moral judgement, their attitude is also better. But very few children showed no or Low aggression level and high Moral Ability.

**REFERENCES**