COMPARISON OF IMPACT OF YOUTH PROGRAM ON EMPATHY AND SOCIAL RESPONSIBILITY IN GIRLS AND BOYS

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Abstract

By developing social vision, education enables children to cooperate with each other, sharing hardship in the way of the upliftment of society. Student tend to become involved if the activity is expected as a course assignment for e.g. or as an expectation of a student organization. The objective of this research paper is to compare the gains in each indicator, Overall empathy and Overall social responsibility between youth Boys and Girls. For which an Experimental method with single group pre-test and post-test design was employed and a random sample of 132 students filled the empathy and SR scale as pre-test and post-test. There was a significant difference between mean scores of gains in OE of boys as compared to girls, and no significant difference between mean scores of gains in EC, PD and PT as well as PST, PD, PT and OSR of the boys as compared to girls after the program.

Keywords: Impact, Empathy, Social responsibility, comparison, Girls and Boys, Youth Program

1.1 Introduction

The present educational experiences fail to appeal our adolescent youth, motivate them and are the least meaningful to their lives. Lack of fruitful education, distinctly appears to be one of the reasons, causing the entire world to suffer, from the ill effects of youth committed terrorism, sex abuse, drug addiction, crimes (WHO, 2006) and violence. Empathy is a component of communication and can only be improved with appropriate training. It allows to understand the intention of others, predict their behaviour and experience an emotion triggered by their emotions. (Yadav and Iqbal, ) If we relate ourselves to the seemingly disadvantaged, challenged and deprived in community it does instil some awakening and realization about our self-worth. (Bong and Skaalvik, 2003) keeping this in mind the researcher has attempted to develop a program of community service for Std. XI students. The researcher had developed and implemented this program to awaken empathy in Std. XI students. The purpose of this paper is to compare the impact of this youth program on the empathy levels of Std. XI boys and girls.

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1.2 Background
1.2.1 Education
As per Upanishad, Education according to Indian tradition is not merely a means of earning a living; nor it is only a nursery of thought or a school for citizenship. It is initiation into the life of spirit and training of human souls in the pursuit of truth and the practice of virtue. By developing social vision, education enables children to cooperate with each other, sharing hardship in the way of the upliftment of society. It is only through education that we can inculcate the feeling of self-sacrifice, patriotism, critical and analytical thinking, character building, etc., which may transform an individual and society. (Agarwal, 2006)

1.2.2 Adolescence
Adolescent education aims to promote healthy attitude and develop skills in young people to respond to real life situations effectively. (Adolescence Education Programme, NCERT)

1.2.3 Empathy
Empathy is a component of communication and can only be improved with appropriate training. It allows to understand the intention of others, predict their behaviour and experience an emotion triggered by their emotions. (Yadav and Iqbal, 2009)

1.2.4 Social responsibility (SR)
Social Responsibility refers to a tendency to help others without expecting immediate personal reward (Berkowitz and Daniel, 1976; as in Akhter and Hossain, 2011) SR is defined as a duty or obligation that an individual has to society, which can be rooted in the welfare of close one’s or extended to broader community. (Gallay, 2006; Kohlberg and Candee, 1984; Rossi, 2005)

1.3 Rationale of study
Empathy may inhibit or prevent harmful behaviours towards others. (Evans, Heriot & Fredman, 2002; as in Lotreanet al, 2012) Student tend to become involved if the activity is expected as a course assignment for e.g. or as an expectation of a student organization. (Levine and Cureton, 1998; as in Marks, Helen, Jones, Susan and Robb, 2004) SR motivates a certain kind of citizenship that is rooted in care and justice, and stems from obligations to contribute to society. Socially responsible individuals are known to act on moral and prosocial grounds. Adolescents’ growing sense of responsibility is a turning point, toward the responsibility of adulthood and peaceful behaviour. (Kongsuwan, 2012)

Today’s urban youth, mechanically shuffles between classes, tuition and college, develop improper eating and study habits, poor health conditions, lack of confidence and low
concentration. This results in mass production of clones of professionals, who are confused, depressed and demotivated. In the long run, this fact has proven disastrous, not only to their own life, but also to our nation and the entire globe. Such frustrated, isolated and dejected youth, resort to drugs, violence, get involved in crimes and delinquencies or get hooked up by gangsters and anti-social groups of the society. Very few researchers have focused on, positive youth development and how to promote empathy during adolescence, although, interest in it has started increasing (Eisenberg et al, 2002).

Hence, development of a program to awaken empathy and social responsibility in the middle adolescents, that would suit their needs and fit in their schedule is the need of the hour. So, the researcher had developed a program with an aim to awaken empathy and social responsibility in Junior collegeyouth, who form a major percentage of today’s India.

1.4 Research Questions
1. What program can be developed and implemented to awaken empathy and social responsibility in youth?
2. What will be the effect of program on the levels of EC, PD, PT and overall empathy in youth boys and girls?
3. What will be the effect of program on the level of PST, PR, CM and overall social responsibility in youth boys and girls?
4. What will be the effect of program on the level of empathy and social responsibility in youth boys as compared to that of girls?

1.5 Review of related literature
Adolescents have a need to create an identity that is unique, while still being able to connect with others. (Ablard, 1997; Cunningham and Rinn, 2007) Social needs such as feelings of belonging, acceptance and attachment, intensify during adolescence. (Esen, 2012) Research has generally found that females have significantly greater levels of Empathy than males. (Lennon. Eisenberg N, 1987) and on affective, cognitive and total Empathy. (Jolliffe & Farrington, 2006) Lindner & Johns (2002) studied the two most common negative reasons for abandoning a structured leisure activity were finding the activity boring and lack of enjoyment. There is a need to provide adolescents with a variety of structured leisure activities that are inclusive and foster positive development. (Fawcett, Garton, Dandy 2009) Service learning is instrumental to cultivating Social Responsibility. (Youniss and Yates, 1997) Participation in service positively predicted youths SR and future civic commitments (Scale, Blyth, Berkas and Kielsmeier, 2000; as in Wray-Lake, Syvertsen, 2011)
1.6 Statement of problem
To develop and implement a program to awaken social responsibility (SR) in youth and find its effectiveness separately on the levels of Empathic Concern (EC), Personal distress (PD), Perspective Taking (PT), Overall Empathy (OE), Prosocial tendency (PST), Personal responsibility (PR), Community mindedness (CM) and overall social responsibility (OSR) in youth, boys and girls and, to compare the gains in each indicators and Overall empathy and social responsibility between youth, boys and girls.

1.7 Operational definitions
1. Empathy: For this research, it is a skill to understand another person’s needs and feelings and taking an active interest in their concern in the Std. XI\textsuperscript{th} students. The indicators considered for this research are- empathic concern, perspective taking and personal distress. Empathy is the ability to be aware of and understand how others feel. (Baron, 2006)

2. Impact: It is the difference in pre-test and post-test scores after implementation of the program to awaken empathy and social responsibility in adolescents.

3. Awaken: For the current research awaken denotes to trigger or raise feeling of empathy and sense of social responsibility in Std. XI adolescents.

4. Social responsibility: For this research, it means a skill that helps Std. XI\textsuperscript{th} youth to understand their roles as a part of community member and awaken a sense of responsibility towards others. The indicators for social responsibility for this research were- prosocial tendency, personal responsibility and community mindedness.

5. Girls and Boys: For this Research, It denotes the adolescent girls and boys studying in Std. XI whose age group lies between 15-16 years.

6. Youth Program: It means an experiential activity that involves community visits and interaction by students studying in Std. XI as a part of their curricular schedule.

7. Comparison: It means to separately analyze the data collected for Boys and girls and compare the findings for each indicator, OE and OSR.

1.8 Objectives
1. To develop a program for youth to awaken empathy and social responsibility in the adolescents and implement it.
2. To find the effectiveness of the program on the level of Empathic Concern (EC), Personal distress (PD) and Perspective taking (PT) as indicators of empathy and Overall Empathy in youth Boys and Girls.

3. To find the effectiveness of the program on the level of Prosocial tendency (PST), Personal responsibility (PT) and Community mindedness (CM) as indicators of social responsibility (SR) and overall SR in youth Boys and Girls.

4. To compare the gains in each indicator, Overall empathy and Overall social responsibility between youth Boys and Girls.

1.9 Hypothesis

1. \( H_0^{1A} \): There will be no significant difference in the mean scores of pre-test and post-test on Empathic concern of Boys before and after implementing the program.
\( H_0^{1B} \): There will be no significant difference in the mean scores of pre-test and post-test on Empathic concern of Girls before and after implementing the program.
\( H_0^{1C} \): There will be no significant difference in the mean scores of Gains in Empathic concern in Boys than Girls before and after implementing the program.

2. \( H_0^{2A} \): There will be no significant difference in the mean scores of pre-test and post-test on Personal distress of Boys before and after implementing the program.
\( H_0^{2B} \): There will be no significant difference in the mean scores of pre-test and post-test on Personal distress of Girls before and after implementing the program.
\( H_0^{2C} \): There will be no significant difference in the mean scores of Gains in Personal distress in Boys than Girls before and after implementing the program.

3. \( H_0^{3A} \): There will be no significant difference in the mean scores of pre-test and post-test on Perspective Taking of Boys before and after implementing the program.
\( H_0^{3B} \): There will be no significant difference in the mean scores of pre-test and post-test on Perspective Taking of Girls before and after implementing the program.
\( H_0^{3C} \): There will be no significant difference in the mean scores of Gains in Perspective Taking in Boys than Girls before and after implementing the program.

4. \( H_0^{4A} \): There will be no significant difference in the mean scores of pre-test and post-test on Overall Empathy of Boys before and after implementing the program.
\( H_0^{4B} \): There will be no significant difference in the mean scores of pre-test and post-test on Overall Empathy of Girls before and after implementing the program.
\( H_0^{4C} \): There will be no significant difference in the mean scores of Gains in Overall Empathy in Boys than Girls before and after implementing the program.
5. \( H_0A \): There will be no significant difference in the mean scores of pre-test and post-test on Prosocial tendency of Boys before and after implementing the program.

\( H_0B \): There will be no significant difference in the mean scores of pre-test and post-test on Prosocial tendency of Girls before and after implementing the program.

\( H_0C \): There will be no significant difference in the mean scores of Gains in Prosocial tendency in Boys than Girls before and after implementing the program.

6. \( H_0A \): There will be no significant difference in the mean scores of pre-test and post-test on Personal responsibility of Boys before and after implementing the program.

\( H_0B \): There will be no significant difference in the mean scores of pre-test and post-test on Personal responsibility of Girls before and after implementing the program.

\( H_0C \): There will be no significant difference in the mean scores of Gains in Personal responsibility in Boys than Girls before and after implementing the program.

7. \( H_0A \): There will be no significant difference in the mean scores of pre-test and post-test on Community mindedness of Boys before and after implementing the program.

\( H_0B \): There will be no significant difference in the mean scores of pre-test and post-test on Community mindedness of Girls before and after implementing the program.

\( H_0C \): There will be no significant difference in the mean scores of Gains in Community mindedness in Boys than Girls before and after implementing the program.

8. \( H_0A \): There will be no significant difference in the mean scores of pre-test and post-test on Overall Social responsibility of Boys before and after implementing the program.

\( H_0B \): There will be no significant difference in the mean scores of pre-test and post-test on Overall Social responsibility of Girls before and after implementing the program.

\( H_0C \): There will be no significant difference in the mean scores of Gains in Overall Social responsibility in Boys than Girls before and after implementing the program.

1.10 Research methodology

To fulfil above objective, an Experimental method with single group pre-test and post-test design was employed for collecting data from sample of students. Effectiveness of the program can be determined if the mean scores of samples on pre-test and post-test are known which can be possible only by Experimental method. Hence, the most suitable method was experimental method. Among the different types of experimental designs, Single group Pre-
test Post-test design was adopted for the present study. In the Single group, Pre-test Post-test design, a single group of subjects is given a pre-test, then the treatment, followed by Post-test.

Sampling used for this study was random sampling. Although the original research being a qualitatively oriented study involved Purposive sampling, followed by random sampling. Sample of 132 students that included 73 boys and 59 girls underwent the program of community service visits to nearby schools for children belonging to underprivileged or rural background. Groups of 20-25 students were allotted a mentor teacher, who guided them to plan and conduct activities for primary school children. Activities were recreational, educational, informative and art and craft based. Each group visited the designated school on planned day and time, where they interacted with the children and conducted various activities for them. This was followed by reflective exercise and discussions to modify activities for next visit. After completion of the program students filled the empathy and SR scale as post-test.

1.11 Data Collection

Data collection tools used for this objective of the present study were as follows:

a) A standardized scale Davis’ Interpersonal Reactivity Index (IRI) (Davis, 1980) was used for collecting data on Empathy levels of adolescents for fulfilling objective 1, as mentioned under objectives for quantitative phase in this chapter. Empathic Concern, Perspective taking and Personal distress were the indicators for measuring empathy levels. Researcher did not administer Fantasy scale for the present study that was done by Barr and Higgins-D’Alessandro (2007).

b) One subscale each from two scales were used for collecting data on Social responsibility levels based on their relevance to the adolescents’ experiences as reviewed in Hamilton and Fenzel (1988). Prosocial behaviour, Personal responsibility and Community mindedness, were the indicators for measuring social responsibility.

i) PTM-R, standardized scale by Carlo and Randall, (2002) made up of six subscales was treated as one dimensional general measure as used by Furman and Sibthorp (2014).

ii) Citizenship and Social Responsibility Survey (csrs.pdf) that was used partly by Ponder, Veldt and Lewis-Ferrell (2011), was similarly used in a shorter version to
collect data for present study to fulfil objective 2, as mentioned under objectives for quantitative phase in this chapter.

1.12 Analysis of Data

After data collection, the responses filled by the subjects were tabulated, converted into scores and analyzed for testing the Null hypothesis. Mean, standard deviation and t-test for paired two sample of means (pre-test and post-test), were calculated for the experimental group of boys and girls, each to determine whether difference was significant. The detailed scores and statistical values for experimental group, comparison of gains in levels of each indicator and levels of overall empathy and social responsibility of sample of boys and girls are given in the tables below.

Table 1 shows the calculated values of means (pre-test and post-test), Pearson correlation, t statistical and p values for EC, PT and PD and OE for the experimental group of boys. It shows a positive increase in the mean of post-test than pre-test.

Table 1 shows the calculated values of means (pre-test and post-test), Pearson correlation, t statistical and p values for EC, PT and PD and OE for the experimental group of girls. It shows a positive increase in the mean of post-test than pre-test.

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Table 1 shows the calculated values of means (pre-test and post-test), Pearson correlation, t statistical and p values for PST, PR, CM and OSR for the experimental group of boys. It shows a positive increase in the mean of post-test than pre-test.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test Mean</th>
<th>Post-test Mean</th>
<th>Pearson Correlation</th>
<th>df</th>
<th>t Stat</th>
<th>P(T&lt;=t) two-tail</th>
<th>t Critical Two-tail</th>
</tr>
</thead>
<tbody>
<tr>
<td>PST</td>
<td>28.75</td>
<td>29.9</td>
<td>0.535</td>
<td>58</td>
<td>1.64</td>
<td>0.107</td>
<td>2</td>
</tr>
<tr>
<td>PR</td>
<td>14.47</td>
<td>15.19</td>
<td>0.371</td>
<td>58</td>
<td>1.77</td>
<td>0.083</td>
<td>2</td>
</tr>
<tr>
<td>CM</td>
<td>15.00</td>
<td>15.31</td>
<td>0.337</td>
<td>58</td>
<td>0.73</td>
<td>0.4671</td>
<td>2</td>
</tr>
<tr>
<td>OSR</td>
<td>58.22</td>
<td>60.39</td>
<td>0.57</td>
<td>58</td>
<td>2.15</td>
<td>0.036</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 1 shows the calculated values of means (pre-test and post-test), Pearson correlation, t statistical and p values for PST, PR, CM and OSR for the experimental group of girls. It shows a positive increase in the mean of post-test than pre-test.

<table>
<thead>
<tr>
<th></th>
<th>Mean (girls)</th>
<th>Mean (Boys)</th>
<th>t Stat</th>
<th>P(T&lt;=t) two-tail</th>
<th>t Critical Two-tail</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
<td>0.03</td>
<td>0.64</td>
<td>1.57</td>
<td>0.119</td>
<td>1.98</td>
</tr>
<tr>
<td>PD</td>
<td>0.07</td>
<td>0.79</td>
<td>1.73</td>
<td>0.086</td>
<td>1.98</td>
</tr>
<tr>
<td>PT</td>
<td>0.41</td>
<td>1.12</td>
<td>1.52</td>
<td>0.131</td>
<td>1.98</td>
</tr>
<tr>
<td>OE</td>
<td>0.51</td>
<td>2.56</td>
<td>2.64</td>
<td>0.009</td>
<td>1.98</td>
</tr>
</tbody>
</table>

(P<0.05 significant)

Table 1 shows the calculated values of differences in means (pre-test and post-test) for boys and girls, t statistical for two sample assuming unequal variances and p values for EC, PT and PD and OE to compare the experimental group of girls and boys. Although t value was positive it was non-significant for EC, PD, PT and OE, which showed that increase in OE in boys was significantly greater than that in girls. Increase in EC, PD and PT values of boys was greater than that of girls but non-significant.

Table 1 shows the calculated values of differences in means (pre-test and post-test) for boys and girls, t statistical for two sample assuming unequal variances and p values for PST, PR, CM and OSR to compare the experimental group of girls and boys. Although t value was positive it was non-significant for PR, CM and OSR which showed that there was an increase.
in levels of PR, CM and OSR in boys that was non-significantly greater than that in girls. The t-value for PST in boys as compared to that in girls was negative which indicates that there was a greater increase in levels of PST in girls as compared to boys.

1.13 Validity and Reliability of scales

Scale for Empathy

The original IRI Scale (Davis, 1980) scale has reported following values for Internal reliability: αs=.70 to .78, and for Test-retest reliability (60 to 75 days): Correlations - Males: between .61 and .79 and Females: between .62 and .81. The scale was extensively validated and checked for reliability, and cited by more than 31 researches.

Researcher took the opinion of experts in the field to reconfirm the selection of scale and relevance of questions for the present study. The reliability of scale was determined by calculating the Spearman-Brown Coefficient which was found to be 0.728.

Scale for Social responsibility

The final scale used was a combination and shortened version of two different scales namely:

a) Prosocial Tendencies Measure (PTM-R) by Carlo and Randall, (2002)

b) Citizenship and Social Responsibility Survey(https://www.bced.gov.bc.ca)

So, researcher has consulted experts from field to validate the combined scale. The reliability of scale was determined by calculating the Spearman-Brown Coefficient which was found to be 0.729.

1.14 Findings and Discussion

A paired sample t-test was conducted to evaluate the impact of the program on students’ mean scores followed by a t-test assuming unequal variances to find out whether the gains in indicators of Boys than girls were significant.

1) The community interaction program did improve students’ levels of EC, PD and PT, and OE as well as PST, PD, PT and OSR that was indicated by the mean and t-test scores for the indicators. There was a significant difference between mean scores of gains in OE of boys as compared to girls, after implementing the Community interaction program.

2) There was no significant difference between mean scores of gains in EC, PD and PT as well as PST, PD, PT and OSR of the boys as compared to girls after the program. A positive t value indicated greater increase in levels of EC, PD and PT as well as PD, PT and OSR in boys as compared to boys. And a negative t value for PST indicated a greater increase in PST levels of girls than boys.
Empathic Concern:

A) EC \( [\text{Pre-test } M_1 = 12.2, \ SD = 2.2, \ Post-test \ M_2 = 13.2, \ SD = 1.93, \ t = 2.59] \)

Since the \( t \)-statistical > \( t \)-critical \( (2.59 > 2.03) \) there was a Significant difference between pre-test and post-test means for EC in experimental group. It implies that there was an improvement in scores of EC level in post-test. Significant difference between pre-test and post-test means for EC in control group too implies that there was an improvement in scores of EC level in post-test.

B) EC \( [\text{Experimental gain } = 0.88, \ Control \ gain = 0.74, \ SD = 1.93, \ t = 0.30] \)

Since the \( t \)-statistical < \( t \)-critical \( (0.30 < 2.00) \) for \( t \)-Test: Two-Sample Assuming Unequal Variances for EC, there was No significant difference in mean scores of gains in EC between experimental and control group. No significant difference between mean scores indicates that impact of program on the students EC level wasn’t as expected. The mean for EC of experimental group was greater than mean for control group. It denotes a greater increase in the EC level of experimental group than control group. Less than expected value, implies that the program did have some positive impact on EC.

C) An unexpected significant difference between means of EC scores of the control group indicated a positive impact of alternate program.

Perspective Taking:

A) PT \( [\text{Pre-test } M_1 = 10.91, \ SD = 2.71, \ Post-test \ M_2 = 12.91, \ SD = 1.98, \ t = 6.20] \)

Since the \( t \)-statistical > \( t \)-critical \( (6.02 > 2.03) \) there was a Significant difference between pre-test and post-test means for PT in experimental group. This implies that there was an improvement in scores of PT level in post-test. The larger difference indicates a considerable impact of the program on the PT level of Boys.

B) PT \( [\text{Experimental gain } = 1.94, \ Control \ gain = 0.41, \ SD = 1.93, \ t = 2.36] \)

Since the \( t \)-statistical > \( t \)-critical \( (2.36 > 2.01) \) it indicated that there was a significant difference in mean scores of gains in PT between experimental and control group. Significant difference between mean scores implies that program had a positive impact on the student’s PT level as expected.

Personal Distress:

A) PD \( [\text{Pre-test } M_1 = 12.14, \ SD = 2.45, \ Post-test \ M_2 = 13.4, \ SD = 1.92, \ t = 3.09] \)

Since the \( t \)-statistical > \( t \)-critical \( (3.09 > 2.03) \) there was a Significant difference between pre-test and post-test means for PD in experimental group. This implies that there was an improvement in scores of PD level in post-test.
B) **PD [Experimental gain=1.29, Control gain = -0.21, SD = 1.93, t = 2.24]**

Since the t-statistical > t-critical (2.24 > 2.01) it indicated that there was a significant difference in mean scores of gains in PD between experimental and control group. Significant difference between mean scores implies that program did have a positive impact on the students’ PD level as expected.

- **Overall Empathy level**
  
  A) **OE [Pre-test M₁ =35.26, Post-test M₂ = 39.51, t = 7.41]**

  Since the t-statistical > t-critical (7.41 > 2.03) there was a Significant difference between pre-test and post-test means for OE in experimental group. This implies that there was an improvement in scores of OE level in post-test. A large difference in the OE level in boys denotes a considerable impact of the program on the OE level of Boys.

  B) **OE [Experimental gain= 4.26, Control gain = 0.97, t = 2.91]**

  Since the t-statistical > t-critical (2.91 > 2.01), it indicates that there was a significant difference in the means for gains in OE of experimental group as compared to control group. Significant difference between mean scores implies that program had greater positive impact on the students’ OE level of experimental group than the control group as expected.

- **Overall Empathy in Boys and Girls**

  A) **OE [Pre-test M₁ =35.26, Post-test M₂ = 39.51, t boys = 6.71, t girls =3.38]**

  Since the t stat > t critical (Boys-6.71 > 2.07 and Girls-3.38 > 2.23), there was a significant difference between pre-test and post-test means for OE in Boys and Girls of the experimental group. Significant difference between pre-test and post-test means for OE in experimental group. This implies that there was an improvement in scores of OE level in post-test.

  B) **OE [Experimental gain= 4.26, Control gain = 0.97, t boys = 2.33, t girls =1.48]**

  Since the t-statistical > t-critical (2.33 > 2.05), it indicates that there was a Significant difference in mean scores of gains in OE in Boys of experimental group as compared to control. This implies that program had greater positive impact on the OE level of Boys in the experimental group than the control group as expected.

  Since the t-statistical < t-critical (1.48 < 2.05), it indicates that there was no significant difference in mean scores of gains in OE in Girls of experimental group as compared to control. This implies that program had lesser positive impact on the OE level of girls in the experimental group than the control group that wasn’t expected.
• **Prosocial tendency**: \[ M_1 = 26.63, SD_1 = 5.26, M_2 = 28.58, SD_2 = 5.49, t_{\text{statistical}} = 4.52 \]
  Since the \( t \)-statistical > \( t \)-critical (4.52 > 1.99) there was a Significant difference between pre-test and post-test means for PT in experimental group. It implies that there was an improvement in scores of PT level in post-test.

• **Personal responsibility**: \[ M_1 = 13.41, SD_1 = 3.35, M_2 = 15.25, SD_2 = 2.46, t_{\text{statistical}} = 5.65 \]
  Since the \( t \)-statistical > \( t \)-critical (5.65 > 1.99) there was a Significant difference between pre-test and post-test means for PR in experimental group. This implies that there was an improvement in scores of PR level in post-test.

• **Community mindedness**: \[ M_1 = 13.72, SD_1 = 3.62, M_2 = 15.44, SD_2 = 2.82, t_{\text{statistical}} = 4.50 \]
  Since the \( t \)-statistical > \( t \)-critical (4.50 > 1.99) there was a Significant difference between pre-test and post-test means for CM in experimental group. This implies that there was an improvement in scores of CM level in post-test.

• **Overall Social responsibility level**: \[ M_1 = 53.76, M_2 = 59.27, t_{\text{statistical}} = 7.85 \]
  Since the \( t \)-statistical > \( t \)-critical (7.85 > 1.99) there was a Significant difference between pre-test and post-test means for OSR in experimental group. This implies that there was an improvement in scores of OSR level in post-test.

### 1.15 Conclusion

It can be concluded form the findings that community interaction programs do have a significant increase on the levels of Overall Empathy and SR of boys and girls as found by Eyler et al (2001) (as in Buch and Harden, 2011). The program had a slightly greater impact on the levels of indicators of Empathy and SR of boys than girls whereas it had a significantly greater impact on the overall OE levels in boys than that in girls. The current global scenario demands planning and implementation of such value based programs in the regular schedule of grade 11 and 12 students. Student empowerment is crucial to the educational, intellectual, and personal development of students. (Duhon-Haynes, 1996; as in Perrin, 2014)

### 1.16 Acknowledgements

I am grateful to IFUWA and UWA, Pune, for partly finding my doctoral program through Dr. Meena Muthiah Scholarship. My sincere gratitude towards the management, Principal and the entire staff of Dr. Kalmadi Shamarao Junior College for their co-operation and encouragement. Our whole-hearted appreciation to Dr. Naik for statistical help and support.

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References


NCERT and UN population Fund (2015). Adolescent Education Programme (AEP) file:///F:/printpurpose/AboutAdolescenceEducationProgramme(AEP)AdolescenceEducationProgramme.html


