

**Analysis of the Training Programs for  
Nodal Teachers and Sensitization Programs  
for Principals Organized under the  
Adolescence Education Program in 2009**

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## **Background of the Study and Analyses Plan:**

The training program for the nodal teachers was conducted in 22 venues across 14 states in 2009. Overall, 28 programs were organized for orienting nodal teachers and another 28 sessions were organized for sensitizing principals. However, the data is available only for 22 programs only. Furthermore, the data collected from the training is analyzed for 4 proformas: Participant's feedback on different aspects of the training, Pre and post t-test scores, Principal's feedback and Observer's feedback

**1) Participant's feedback on different aspects of the training program:** The questions asked to the nodal teachers are categorized into five constructs to measure the quality across 6-point scale ranging from 'unsatisfactory' to 'excellent.' However, separate analysis is done for items on gains from interaction with students and duration of training program since they have an important bearing on the program design and duration of the program in the future.

### **Five constructs are:**

- a) Coverage of content
- b) Integration of life skills
- c) Participation of trainees in interactive process
- d) Clarity among trainees for transacting activities among school students
- e) Logistics of the training program

**2) Pre and post t-test scores:** Questions are asked to the participants including nodal teachers and master trainers to analyze the change in their knowledge and attitude before and after the training. The questions are categorized into 4 constructs to generate knowledge scores and attitude scores..

- a) Knowledge scores: 3 themes are analyzed, i.e., changes during adolescence, prevention of RTI/STI and prevention of substance abuse. The scores for each theme ranged from 0-20, 0-17 and 0-9 respectively.
- b) Attitude scores: 3 themes are analyzed, i.e., gender and sexuality, HIV and substance abuse. The attitude items have been scored as '1' for most conservative response and '5' for the most progressive response. Although to maintain the logic, some items are flipped for the analysis purpose. '*Strongly agree*' receives a score of 5, '*somewhat agree*' receives a score of 4, '*don't know*' retains the score of 3, '*somewhat disagree*' receives a score of 2 and '*strongly disagree*' receives a score of 1.
- c) Application of life skills: In this there is only one correct response for each item.
- d) Some of the questions are analyzed separately because they cannot be categorized into '*most conservative*' or '*most progressive*' attitude scores.

**3) Principal's feedback:** Principals are asked to do the assessment of the following two constructs:

- a) Quality of the advocacy session in enabling the principals to perform the role of actively promoting the program in their schools.
- b) Personal assessment in being equipped for the role.

**4) Observer's feedback:** The feedback is analyzed across 6 items on a 5 point scale.

## Analysis for the Teachers 'Feedback

**Table-1 Mean Scores of five Themes by Venues (Teachers' Feedback)**

Venues	Coverage of Content	Integration of life skills	Participation of Trainees	Clarity among Trainees	Logistics of Training Program
Moradabad	5.08	5.57	5.18	5.23	5.03
Hyderabad	4.67	5.10	4.81	4.89	4.11
Thrissur	5.07	5.20	4.71	4.72	4.49
Jaipur	5.47	5.65	5.56	5.39	5.38
Faizabad	5.09	5.16	5.00	5.05	4.89
Sundargarh	5.02	5.19	4.86	4.70	4.77
Ludhiana	5.17	5.22	5.04	5.16	4.94
Jabalpur	4.94	5.13	4.74	4.80	4.98
Jhunjhunu	4.94	4.95	4.60	4.78	4.50
Vijaywada	5.00	5.15	5.01	5.23	5.10
Bhagalpur	4.98	5.32	4.80	4.84	4.95
Bardhaman	4.48	4.74	4.56	4.51	4.75
Gwalior	5.47	5.29	5.30	5.26	5.23
Patiala	5.19	5.49	5.04	5.01	5.27
Guwahati	5.41	5.79	5.38	5.39	5.22
Bilaspur	-----	-----	-----	-----	-----
Lucknow	-----	-----	-----	-----	-----
Bhopal	4.80	5.15	4.89	4.96	4.47
Chennai	4.74	4.97	4.60	4.59	4.19
Gurgaon	4.66	4.67	4.41	4.43	4.04
Kochi	-----	-----	-----	-----	-----
Imphal	5.07	5.27	4.62	4.75	3.94
<b>Total</b>	<b>4.98</b>	<b>5.17</b>	<b>4.86</b>	<b>4.89</b>	<b>4.71</b>
<b>N</b>	<b>658</b>	<b>743</b>	<b>728</b>	<b>700</b>	<b>731</b>

-----Data is not available for Venues 16, 17 and 21

Feedback on the quality of training program is measured across the following 5 constructs:

- 1) Coverage of content
- 2) Integration of life skills
- 3) Participation of trainees in interactive process
- 4) Clarity among trainees for transacting activities among school students
- 5) Logistics of the training program

The average score for coverage of content lies between very good and good, however, almost 11 venues show an average between excellent and very good. Venue 4- Jaipur and Venue 13- Gwalior have the maximum score while venue 2 – Hyderabad has the least mean score for the coverage of content. The second theme- Integration of Life skill has an average score between excellent and very good. Almost 15 venues lie between excellent and very good category. Venue 15- Guwahati has a maximum mean score and venue 20- Gurgaon has the least mean score. Regarding participation of trainees, the average score lies between very good and good and 8 venues show a score between excellent and very good. Venue 4- Jaipur has the highest mean score while venue 20- Gurgaon has the least mean score. Clarity among trainees has an average score between very good and good category. Around 8 venues have a score between excellent and very good category with venue 15- Guwahati lying in that category having the maximum score; Venue 20-Gurgaon shows a least mean score for this theme. The last theme- Logistics of training program has a mean score between very good and good category with 6 venues lying in the excellent and very good category. Venue 4-Jaipur has a maximum score between excellent and very good category, while venue 22- Imphal has a least score between good and average.

**Table-2 Average Quality Across Five Constructs by States**

States	Coverage of Content	Integration of life skills	Participation of Trainees	Clarity among Trainees	Logistics of Training Program
Uttar Pradesh	5.09	5.46	5.13	5.18	4.99
Andhra Pradesh	4.81	5.12	4.88	5.01	4.46
Kerala	5.07	5.20	4.71	4.72	4.49
Rajasthan	5.08	5.12	4.84	4.91	4.72
Orissa	5.02	5.19	4.86	4.70	4.77
Punjab	5.18	5.38	5.04	5.06	5.13
Madhya Pradesh	5.08	5.19	4.97	5.00	4.89
Bihar	4.98	5.32	4.80	4.84	4.95
West Bengal	4.48	4.74	4.56	4.51	4.75
Assam	5.41	5.79	5.38	5.39	5.22
Chhattisgarh	-----	-----	-----	-----	-----
Tamilnadu	4.74	4.97	4.60	4.59	4.19
Haryana	4.66	4.67	4.41	4.43	4.04
Manipur	5.07	5.27	4.62	4.75	3.94
<b>Total</b>	<b>4.98</b>	<b>5.17</b>	<b>4.86</b>	<b>4.89</b>	<b>4.71</b>
<b>N</b>	<b>658</b>	<b>743</b>	<b>728</b>	<b>700</b>	<b>731</b>

-----Data is not available for States (Average score of 5)

When the data is analyzed statewise for five themes regarding teachers' feedback, integration of life skill has come out with the maximum mean score between excellent and very good. Assam fare-well with a maximum score while Haryana has a least mean score for the coverage of content. For the integration of life skill, again Assam has a maximum mean score and Haryana has the least score. The condition remains similar for the other three themes, i.e., participation of trainees, clarity among trainees and logistics of training program.

**Table-3 Average Quality of Training by Five Construct Across 22 Venues**

Construct	Mean Score	N
Coverage of Content	4.98	658
Integration of Life Skills	5.17	743
Participation of Trainees in Interactive Process	4.86	728
Clarity among Trainees for Transacting Activities	4.89	700
Logistics of the Training Program	4.71	731

The mean scores for 5 construct are between 4- 5 indicating that the quality of the various constructs lie between good and very good category. Only the score for integration of life skills lie in very good to excellent category.

**Table-4 Mean Scores for Q 9 and Q 17 by Venue**

Venues	Gains from Interaction	Duration of Training
Moradabad	5.20	4.32
Hyderabad	4.92	3.51
Thrissur	4.53	3.84
Jaipur	5.15	4.85
Faizabad	5.04	4.52
Sundargarh	5.58	4.25
Ludhiana	5.30	4.29
Jabalpur	5.09	4.21
Jhunjhunu	5.15	3.85
Vijaywada	4.96	4.65
Bhagalpur	4.91	4.83
Barddhaman	4.67	4.18
Gwalior	5.47	4.51
Patiala	5.00	4.77
Guwahati	5.55	4.82
Bilaspur	-----	-----
Lucknow	-----	-----
Bhopal	4.66	3.57
Chennai	4.44	3.72
Gurgaon	4.73	3.25
Kochi	-----	-----
Imphal	4.59	2.86
<b>Total</b>	<b>4.99</b>	<b>4.09</b>
N	728	751

*-----Data is not available for Venues 16, 17 and 21*

From Participants feedback- separate analyses were done for the following two indicators as they had an important bearing on program design and duration in the future.

-Perceived gain from interaction with students (Q9)

- Duration of training program (Q17)

For the theme Gains from interactions conducted with the students, the analysis show that the mean score for 10 venues lie between excellent and very good category , with venue 6- Sundergarh having the maximum score and venue 19- Chennai has the least score. Regarding Duration of the training program- mean score for 12 venues lie between very good and good category. Venue 4- Jaipur has a maximum score and venue 22- Imphal has a minimum mean score. Findings suggest that majority of the participants valued the interaction with students. With an average score of 5, it seems that more discussion is needed around the duration of the training program.

**Table-5 Mean Scores for Q 9& Q 17 by State**

<b>States</b>	<b>Gains from Interaction</b>	<b>Duration of Training</b>
Uttar Pradesh	5.15	4.38
Andhra Pradesh	4.93	3.90
Kerala	4.53	3.84
Rajasthan	5.15	4.09
Orissa	5.58	4.25
Punjab	5.11	4.57
Madhya Pradesh	5.08	4.08
Bihar	4.91	4.83
West Bengal	4.67	4.18
Assam	5.55	4.82
Chhattisgarh	-----	-----
Tamilnadu	4.44	3.72
Haryana	4.73	3.25
Manipur	4.59	2.86
<b>Total</b>	<b>4.99</b>	<b>4.09</b>
<b>N</b>	<b>728</b>	<b>751</b>

*-----Data is not available for States*

For the theme Gains from interactions with the students conducted with the students, the analysis show that Orissa has a mean score between excellent and very good category, while Tamil Nadu has a least score between very good and good category. Regarding Duration of the training program, Bihar has a maximum score while Manipur has the least score lying between average and satisfactory category. Overall the findings suggest participants valued gains from interaction with students and thus there is a need to increase the duration of training program.

## 2. Pre-post survey analysis- Table 1: Knowledge-Theme Venue wise (Pre-Post Survey Analysis)

Venue	Changes during Adolescence			RTI/STI			Substance Abuse			No. of Observations	
	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey	Pre Survey
Moradabad	17.8	16.2	3.73***	11.8	11.7	0.11	6.9	6.5	1.08	57	59
Hyderabad	17.0	16.6	0.94	12.4	12.2	0.65	7.4	6.6	3.05***	45	95
Thrissur	17.2	16.1	2.37**	12.4	12.1	1.01	7.7	7.1	1.69*	52	49
Jaipur	14.2	15.2	-0.64	11.5	11.4	0.16	6.4	5.8	0.72	16	15
Faizabad	16.7	15.4	1.81*	12.1	11.5	1.02	7.1	4.4	5.40***	25	19
Sundargarh	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ludhiana	18.5	17.7	1.66*	12.6	12.8	-0.41	7.9	7.2	2.29**	38	45
Jabalpur	16.9	15.6	1.92**	12.5	11.8	1.59	7.5	5.9	4.20***	41	53
Jhunjhunu	18.0	16.7	3.00***	12.8	12.0	2.17**	7.6	6.7	2.28**	39	45
Vijaywada	18.1	15.5	4.55***	12.6	12.3	0.99	7.7	6.8	2.03**	23	33
Bhagalpur	16.0	15.3	1.24	11.9	11.1	1.41	7.0	6.3	1.43	54	52
Bardhaman	18.9	17.0	5.47***	12.7	12.7	0.11	8.1	7.3	3.37***	50	50
Gwalior	17.3	16.8	0.99	12.6	12.3	0.53	7.1	6.7	0.85	43	46
Patiala	18.3	16.9	3.91***	12.7	12.0	1.99**	7.7	7.3	1.81*	57	53
Guwahati	15.9	13.9	3.09***	13.0	11.4	3.09***	8.0	6.8	3.03***	22	22
Bilaspur	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Lucknow	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Bhopal	17.5	16.5	2.23**	12.4	12.0	1.20	7.8	6.3	4.68***	47	44
Chennai	16.0	14.8	1.83*	12.1	12.1	-0.11	6.1	6.4	-0.64	35	21
Gurgaon	17.6	16.5	2.62**	12.4	12.3	0.36	7.8	6.8	3.31***	52	75
Kochi	18.2	16.4	3.69***	13.7	12.2	2.98***	8.0	6.7	3.13***	38	40
Imphal	17.5	16.0	3.54***	12.8	12.2	2.19**	7.8	6.6	3.37***	36	35
<b>Total</b>	<b>17.4</b>	<b>16.3</b>	<b>9.31***</b>	<b>12.5</b>	<b>12.0</b>	<b>4.15***</b>	<b>7.5</b>	<b>6.6</b>	<b>9.64***</b>	<b>770</b>	<b>851</b>
<b>Score</b>	<b>(0-20)</b>			<b>(0-17)</b>			<b>(0-9)</b>			<b>(0-46)</b>	

*Significance- \*\*\*0.01 level (2-tailed), \*\*0.05 level (2-tailed), \*0.10 level (2-tailed), ----data not available for these venues*

The t-test results for specific themes such as knowledge regarding adolescence and substance abuse are significant for more than fifty percent of the venues. However, for the theme knowledge regarding RTI/STI, only a few venues show significant outcomes. This shows that there has been an improvement in the knowledge level of the people after the adolescence education program, but only for specific themes. Venue 4- Jaipur and

Venue 19- Chennai do not fare well as compared to rest of the venues and consistently show poor results for all the themes. Thus the program is successful in imparting knowledge regarding adolescence and substance abuse only.

**Table 2: Attitudes theme-Venue wise**

Venue	Gender & Sexuality			HIV			Substance Abuse			No. of Observations	
	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey	Pre Survey
Moradabad	77.6	76.9	0.43	20.2	19.2	1.33	10.9	11.0	-0.03	57	59
Hyderabad	79.8	79.4	0.22	20.3	19.8	0.76	11.1	10.3	1.39	45	95
Thrissur	82.7	78.9	2.36**	20.0	18.7	1.44	12.4	10.3	3.24***	52	49
Jaipur	72.5	74.7	-0.49	19.7	19.6	0.05	10.6	10.2	0.31	16	15
Faizabad	71.7	71.7	0.00	19.9	18.8	0.83	10.9	9.5	1.72*	25	19
Sundargarh	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ludhiana	84.3	81.8	1.63	20.5	19.4	1.66	12.4	11.3	2.05**	38	45
Jabalpur	79.5	78.0	0.87	21.0	19.9	1.70*	12.2	10.5	2.82***	41	53
Jhunjhunu	80.2	76.8	1.43	19.2	20.2	-1.19	11.3	10.4	1.40	39	45
Vijaywada	86.0	83.0	1.24	20.5	19.7	0.80	12.0	10.7	1.43	23	33
Bhagalpur	77.1	74.2	1.49	19.3	18.9	0.59	10.4	10.5	-0.18	54	52
Bardhaman	82.1	79.6	1.61	18.8	18.9	-0.13	11.1	10.9	0.43	50	50
Gwalior	79.1	78.9	0.08	19.9	19.7	0.22	11.3	10.3	1.81*	43	46
Patiala	83.8	80.4	2.22**	21.4	20.6	1.18	12.4	11.1	2.64***	57	53
Guwahati	83.4	80.6	1.36	19.9	19.4	0.40	11.9	11.4	0.51	22	22
Bilaspur	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Lucknow	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Bhopal	77.5	75.6	1.16	20.3	18.8	1.99**	11.9	10.4	2.91***	47	44
Chennai	77.5	78.9	-0.52	18.9	18.2	0.70	11.0	11.2	-0.24	35	21
Gurgaon	81.1	78.5	1.20	20.0	19.2	0.87	11.6	10.2	2.32**	52	75
Kochi	82.2	74.3	3.96***	19.1	19.7	0.71	12.1	10.6	2.22**	38	40
Imphal	76.7	73.8	1.19	21.8	21.2	0.66	11.7	10.2	2.07**	36	35
<b>Total</b>	<b>80.0</b>	<b>78.0</b>	<b>4.15***</b>	<b>20.0</b>	<b>19.5</b>	<b>2.82***</b>	<b>11.5</b>	<b>10.6</b>	<b>6.68</b>	<b>770</b>	<b>851</b>
<i>Scores</i>	<i>(21-105)</i>			<i>(6-30)</i>			<i>(3-15)</i>			<i>(30-150)</i>	

Significance- \*\* \*0.01 level (2-tailed), \*\*0.05 level (2-tailed), \*0.10 level (2-tailed), ----data not available for these venues



The t-test results between post-survey and pre-survey are significant only for few venues. This shows that there has been a slight improvement in the attitude of the people after the adolescence training program. The attitude regarding substance abuse show significant results in nearly fifty percent of the venues, while the rest two themes show significant results in two to three venues only. Venues 3- Thrissur, 14- Patiala, 18- Bhopal and 21-Kochi do show change in the attitude of people for at least two themes. Thus the findings suggest that attitude change is more difficult and people need time to improve in their attitudes.

**Table 3- Overall knowledge and Attitude Score by Venue wise**

Venue	Knowledge			Attitude		
	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)
Moradabad	36.6	34.5	2.12**	108	107	0.78
Hyderabad	36.9	35.4	1.94*	111	109	0.76
Thrissur	37.5	35.3	2.44**	115	108	3.10***
Jaipur	32.2	32.4	-0.07	102	104	-0.27
Faizabad	36.0	31.4	3.32***	102	100	0.51
Sundargarh	-----	-----	-----	-----	-----	-----
Ludhiana	39.1	37.8	1.45	117	112	2.32**
Jabalpur	37.0	33.4	2.97***	112	108	1.85*
Jhunjhunu	38.5	35.5	3.40***	110	107	1.09
Vijaywada	38.5	34.7	3.66***	118	113	1.48
Bhagalpur	35.0	32.8	1.59	106	103	1.24
Barddhaman	39.8	37.0	4.12***	112	109	1.26
Gwalior	37.1	36.0	0.94	110	109	0.50
Patiala	38.8	36.3	3.82***	117	112	2.57**
Guwahati	37.0	32.2	4.51***	115	111	1.33
Bilaspur	-----	-----	-----	-----	-----	-----
Lucknow	-----	-----	-----	-----	-----	-----
Bhopal	37.9	34.8	3.32***	109	104	2.28**
Chennai	34.3	33.5	0.60	107	108	-0.24
Gurgaon	37.9	35.7	2.81***	112	108	1.46
Kochi	39.9	35.3	4.29***	113	104	3.11***
Imphal	38.3	34.8	5.02***	110	105	1.48
<b>Total</b>	<b>37.5</b>	<b>35.0</b>	<b>9.94***</b>	<b>111</b>	<b>108</b>	<b>5.41***</b>
Scores	(0-46)			(30-150)		

Significance- \*\* \*0.01 level (2-tailed), \*\*0.05 level (2-tailed), \*0.10 level (2-tailed), ----data not available for these venues

The t-test results for overall knowledge and attitude by venues show that there is a tremendous change in the knowledge levels of the people post survey, however, the attitude of the people did not change much post-survey. Again the results show that venue 4- Jaipur is performing poorly for overall knowledge and attitude scores.

**Table 4- Knowledge Theme by States**

State	Adolescent			RTI/STI			Substance Abuse			No. of Observations	
	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey	Pre Survey
Uttar Pradesh	17.5	16.0	3.93***	11.9	11.7	0.62	6.9	6.0	3.25***	82	78
Andhra Pradesh	17.3	16.3	3.01***	12.5	12.2	1.06	7.5	6.6	3.78***	68	128
Kerala	17.6	16.2	4.11***	12.9	12.1	2.78***	7.8	6.9	3.29***	90	89
Rajasthan	16.9	16.3	1.04	12.4	11.8	1.52	7.2	6.5	2.12**	55	60
Orissa	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Punjab	18.3	17.3	3.82***	12.7	12.4	1.07	7.8	7.2	2.92***	95	98
Madhya Pradesh	17.3	16.3	3.11***	12.5	12.0	1.93*	7.5	6.3	5.29***	131	143
Bihar	16.0	15.3	1.24	11.9	11.1	1.41	7.0	6.3	1.43	54	52
West Bengal	18.9	17.0	5.47***	12.7	12.7	0.11	8.1	7.3	3.37***	50	50
Assam	15.9	13.9	3.09***	13.0	11.4	3.09***	8.0	6.8	3.03***	22	22
Chhattisgarh	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Tamilnadu	16.0	14.8	1.83*	12.1	12.1	-0.11	6.1	6.4	-0.64	35	21
Haryana	17.6	16.5	2.62**	12.4	12.3	0.36	7.8	6.8	3.31***	52	75
Manipur	17.5	16.0	3.54***	12.8	12.2	2.19**	7.8	6.6	3.37***	36	35
<b>Total</b>	<b>17.4</b>	<b>16.3</b>	<b>9.31***</b>	<b>12.5</b>	<b>12.0</b>	<b>4.15***</b>	<b>7.5</b>	<b>6.6</b>	<b>9.64***</b>	<b>770</b>	<b>851</b>
<i>Min-Max Scores</i>	<i>(0-20)</i>			<i>(0-17)</i>			<i>(0-9)</i>			<i>(0-46)</i>	

*Significance- \*\* \*0.01 level (2-tailed), \*\*0.05 level (2-tailed), \*0.10 level (2-tailed), ----data not available for these states*

The t-test results for specific themes such as knowledge regarding adolescence and substance abuse are significant for majority of the states. However, for the theme knowledge regarding RTI/STI, only four states show significant outcomes. This shows that there has been an improvement in the knowledge level of the people after the adolescence education program, but only for specific themes. Tamil Nadu does not fare well as compared to rest of the states and show poor results for knowledge regarding RTI/STI and substance abuse. Thus the program is successful in majority of the states for imparting knowledge regarding adolescence and substance abuse only.

**Table 5- Attitude Theme by States**

State	Gender & Sexuality			HIV			Substance Abuse			No. of Observations	
	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey	Pre Survey
Uttar Pradesh	75.8	75.6	0.09	20.1	19.1	1.55	10.9	10.6	0.68	82	78
Andhra Pradesh	81.9	80.0	1.13	20.4	19.8	1.08	11.4	10.4	2.06**	68	128
Kerala	82.5	76.8	4.44***	19.6	19.2	0.66	12.2	10.4	3.93***	90	89
Rajasthan	77.9	76.3	0.79	19.3	20.0	-0.98	11.1	10.3	1.29	55	60
Orissa	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Punjab	84.0	81.1	2.72***	21.0	20.0	2.06**	12.4	11.2	3.35***	95	98
Madhya Pradesh	78.6	77.5	1.07	20.4	19.5	2.13**	11.8	10.4	4.35***	131	143
Bihar	77.1	74.2	1.49	19.3	18.9	0.59	10.4	10.5	-0.18	54	52
West Bengal	82.1	79.6	1.16	18.8	18.9	-0.13	11.1	10.9	0.43	50	50
Assam	83.4	80.6	1.36	19.9	19.4	0.40	11.9	11.4	0.51	22	22
Chhattisgarh	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Tamilnadu	77.5	78.9	-0.52	18.9	18.2	0.70	11.0	11.2	-0.24	35	21
Haryana	81.1	78.5	1.20	20.0	19.2	0.87	11.6	10.2	2.32**	52	75
Manipur	76.7	73.8	1.19	21.8	21.2	0.66	11.7	10.2	2.07**	36	35
<b>Total</b>	<b>80.0</b>	<b>78.0</b>	<b>4.15***</b>	<b>20.0</b>	<b>19.5</b>	<b>2.82***</b>	<b>11.5</b>	<b>10.6</b>	<b>6.68</b>	<b>770</b>	<b>851</b>
<i>Min-Max Scores</i>	<i>(21-105)</i>			<i>(6-30)</i>			<i>(3-15)</i>			<i>(30-150)</i>	

*Significance- \*\* \*0.01 level (2-tailed), \*\*0.05 level (2-tailed), \*0.10 level (2-tailed), ----data not available for these states*

The t-test results between post-survey and pre-survey are significant only for few states. This shows that there has been a slight improvement in the attitude of the people after the adolescence training program. The attitude regarding substance abuse show significant results in six states, while the rest two themes show significant results in two states each. Tamil Nadu shows least change in the attitude of the people regarding gender and sexuality and substance abuse, followed by Bihar and West Bengal.

**Table-6 Overall Knowledge and Attitude by State**

Venue	Knowledge			Attitude			No. of Observations	
	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey	Pre Survey
Uttar Pradesh	36.5	33.7	3.29***	106	105	0.71	82	78
Andhra Pradesh	37.5	35.2	3.59***	113	110	1.67*	68	128
Kerala	38.5	35.3	4.62***	114	106	4.43***	90	89
Rajasthan	36.7	34.7	1.81*	108	106	0.62	55	60
Orissa	-----	-----	-----	-----	-----	-----	-----	-----
Punjab	38.9	37.0	3.56***	117	112	3.46***	95	98
Madhya Pradesh	37.3	34.7	4.16***	110	107	2.46**	131	143
Bihar	35.0	32.8	1.59	106	103	1.24	54	52
West Bengal	39.8	37.0	4.12***	112	109	1.26	50	50
Assam	37.0	32.2	4.51***	115	111	1.33	22	22
Chhattisgarh	-----	-----	-----	-----	-----	-----	-----	-----
Tamilnadu	34.3	33.5	0.60	107	108	0.24	35	21
Haryana	37.9	35.7	2.81***	112	108	1.46	52	75
Manipur	38.3	34.8	5.02***	110	105	1.48	36	35
<b>Total</b>	<b>37.5</b>	<b>35.0</b>	<b>9.94***</b>	<b>111</b>	<b>108</b>	<b>5.41***</b>	<b>770</b>	<b>851</b>
<b>Min-Max Scores</b>	<b>(0-46)</b>			<b>(30-150)</b>				

*Significance- \*\* \*0.01 level (2-tailed), \*\*0.05 level (2-tailed), \*0.10 level (2-tailed), ----data not available for these states*

The t-test results for overall knowledge and attitude by states show that there is a tremendous change in the knowledge levels of the people post-survey, however, the attitude of the people did not change much post survey. Again Tamil Nadu does not show any significant change in overall knowledge and attitude scores compared to rest of the states.

**Table-7 Overall Change in Knowledge, Attitude and Sub Themes across 22 Venues**

<b>Item</b>	<b>Pre Training Mean Score (N=851)</b>	<b>Post Training Mean Score (N=770)</b>	<b>t-value</b>	<b>Score Range</b>
<b>Overall Knowledge</b>	<b>35.0</b>	<b>37.5</b>	<b>9.94***</b>	<b>0-50</b>
Adolescent	16.3	17.4	9.31***	0-22
RTI/STD	12.0	12.5	4.15***	0-19
Substance Abuse	6.6	7.5	9.64***	0-9
<b>Overall Attitude</b>	<b>108.1</b>	<b>111.6</b>	<b>5.41***</b>	<b>32-160</b>
Gender & Sexuality	78.0	80.0	4.15***	22-110
HIV	19.5	20.0	2.82***	7-35
Substance Abuse	10.6	11.5	6.68	3-15

*Significance-\*\*\* 0.01 level (2-tailed)*

When t-test is done to analyze the changes between pre survey and post survey in overall knowledge and attitude, it is observed that there is a significant improvement in the overall knowledge and its sub themes of the participants, however when t-test is carried out to observe the change in the overall attitude, the results are significant for most of the themes, although knowledge regarding substance abuse does not show much improvement.

**Table 8: Application of Life Skills-Venue wise**

Venue	Application of Life Skills			No. of Observations	
	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey	Pre Survey
Moradabad	3.0	2.9	0.61	57	59
Hyderabad	3.3	3.0	1.15	45	95
Thrissur	3.1	2.8	1.00	52	49
Jaipur	2.4	2.6	-0.29	16	15
Faizabad	2.9	2.4	0.97	25	19
Sundargarh	-----	-----	-----	-----	-----
Ludhiana	3.2	3.1	0.51	38	45
Jabalpur	2.6	2.8	-0.72	41	53
Jhunjhunu	2.8	2.6	0.52	39	45
Vijaywada	3.2	3.1	0.10	23	33
Bhagalpur	2.7	2.2	1.78*	54	52
Bardhaman	2.8	3.0	-0.75	50	50
Gwalior	2.8	2.9	-0.35	43	46
Patiala	2.9	3.0	-0.52	57	53
Guwahati	3.0	3.0	0.16	22	22
Bilaspur	-----	-----	-----	-----	-----
Lucknow	-----	-----	-----	-----	-----
Bhopal	2.7	2.9	-0.96	47	44
Chennai	2.5	2.6	-0.35	35	21
Gurgaon	2.7	2.7	-0.30	52	75
Kochi	2.8	2.1	2.34**	38	40
Imphal	2.8	2.1	2.54**	36	35
<b>Total</b>	<b>2.9</b>	<b>2.8</b>	<b>1.40</b>	<b>770</b>	<b>851</b>
<i>Min-Max Scores</i>	(0-5)				

*Significance- \*\*0.01 level (2-tailed), \*0.05 level (2-tailed), \*0.10 level (2-tailed), ----data not available for these venues*

The t-test scores for the application of life skills suggest that only three venues, Venue 11- Bhagalpur, Venue 21- Kochi and Venue 22- Imphal have shown a significant improvement while majority of the venues do not show any significant change post-survey. Nearly forty percent of the venues do not fare well as compared to rest of the venues when it comes to application of life skills.

**Table 9 Application of Life Skills Scores by States**

State	Application of Life Skills			No. of Observations	
	Post Survey (Mean)	Pre Survey (Mean)	t-value (sig.)	Post Survey N=770	Pre Survey N=851
Uttar Pradesh	3.0	2.8	0.99	82	78
Andhra Pradesh	3.2	3.1	0.99	68	128
Kerala	3.0	2.5	2.35**	90	89
Rajasthan	2.7	2.6	0.18	55	60
Orissa	-----	-----	-----	-----	-----
Punjab	3.0	3.0	-0.13	95	98
Madhya Pradesh	2.7	2.8	-1.09	131	143
Bihar	2.7	2.2	1.78*	54	52
West Bengal	2.8	3.0	-0.75	50	50
Assam	3.0	3.0	0.16	22	22
Chhattisgarh	-----	-----	-----	-----	-----
Tamilnadu	2.5	2.6	-0.35	35	21
Haryana	2.7	2.7	-0.30	52	75
Manipur	2.8	2.1	2.54**	36	35
<b>Total</b>	<b>2.9</b>	<b>2.8</b>	<b>1.40</b>	<b>770</b>	<b>851</b>
<b>Min-Max Scores</b>	<b>(0-5)</b>				

*Significance- \*\* \*0.01 level (2-tailed), \*\*0.05 level (2-tailed), \*0.10 level (2-tailed), ----data not available for these states*

The t-test scores for the application of life skills suggest that only three states show a significant improvement while majority of the states do not show any significant change post survey. Punjab, Madhya Pradesh, West Bengal, Tamil Nadu and Haryana do not fare well as compared to rest of the states when it comes to application of life skills.

**Table 10- Frequency distribution and mean scores for Item No- 53, 57, 59 & 62 for Attitude**

Statements	Q 53 (%)	Q57 (%)	Q59 (%)	Q62 (%)
Strongly Agree	6.0	16.3	5.2	41.0
Somewhat Agree	4.8	15.5	18.3	18.3
Don't Know	6.0	4.1	6.0	27.8
Somewhat Disagree	3.9	22.7	23.3	5.6
Strongly Disagree	79.3	41.4	47.2	7.3
Mean Score	4.4	3.5	3.8	2.2
<i>N</i>	<i>1621</i>	<i>1621</i>	<i>1621</i>	<i>1621</i>

**Q 53- Mother is responsible for the sex of the child**

**Q 57- It is better for adolescents to discuss personal problems with their friends than with their parents**

**Q 59- Interference by parents in the personal matters of adolescents is not desirable**

**Q 62- Adolescent and youth should observe abstinence**

When analyses were done for understanding the attitude towards various responses, almost 80 percent of the participants disagreed when asked that mother is responsible for the sex of the child. Nearly one fourth disagreed on the issues that adolescents should discuss their personal problems with friends rather than their parents. More than 50 percent participants believe that parents should interfere in the personal matters of the adolescents. Around 40 percent agreed that adolescents and youth should observe abstinence. However, one third did not know whether adolescents and youth should observe abstinence or not.



### 3. Principals' Feedback Analysis

**Table-1 Principal feedback by venue**

Venues	Quality of Advocacy Session	Personal Assessment of preparedness in advocating AEP to others
Moradabad	4.1	4.2
Hyderabad	3.9	4.0
Thrissur	3.8	3.8
Jaipur	3.9	4.0
Faizabad	4.3	4.2
Sundargarh	-----	-----
Ludhiana	3.9	4.2
Jabalpur	4.1	3.7
Jhunjhunu	4.1	4.0
Vijaywada	-----	-----
Bhagalpur	4.2	4.0
Bardhaman	3.7	4.3
Gwalior	3.8	3.9
Patiala	4.1	4.1
Guwahati	4.7	4.4
Bilaspur	-----	-----
Lucknow	-----	-----
Bhopal	3.9	4.1
Chennai	4.1	4.1
Gurgaon	3.9	4.2
Kochi	-----	-----
Imphal	3.9	3.9
Total	<b>4.0</b>	<b>4.0</b>
N	<b>299</b>	<b>318</b>

*-----Data is not available for Venues 6, 16, 17 and 21*

The advocacy feedback by the Principals for the quality of the advocacy is analyzed by venue. The analysis found that Venue 5- Faizabad has a maximum mean score while Venue 12-Bardhaman has a least mean score. Again for the personal assessment in being equipped for the role, Venue 5-Faizabad has the maximum mean score, while Venue 8- Jabalpur has the least mean score. Thus on a scale of 1-5, majority of the principals graded that they have a quality to advocate and perform their role actively in promoting the program at their schools, however, they were little strict in assessing themselves in being equipped for the role.

**Table2- Principal feedback by State**

<b>Venues</b>	<b>Quality of Advocacy Session</b>	<b>Personal Assessment of preparedness in advocating AEP to others</b>
Uttar Pradesh	4.19	4.24
Andhra Pradesh	3.96	4.02
Kerala	3.92	3.80
Rajasthan	4.07	4.00
Orissa	-----	-----
Punjab	4.05	4.19
Madhya Pradesh	3.99	3.90
Bihar	4.22	4.05
West Bengal	3.77	4.33
Assam	4.76	4.40
Chhattisgarh	-----	-----
Tamilnadu	4.15	4.13
Haryana	3.90	4.21
Manipur	3.98	3.93
<b>Total</b>	<b>4.05</b>	<b>4.07</b>
<b>N</b>	<b>299</b>	<b>318</b>

*-----Data is not available for these states*

The advocacy feedback by the Principals for the quality of the advocacy is analyzed by state. The analysis found that Assam has a maximum mean score while West Bengal has a least mean score. Again for the personal assessment in being equipped for the role, Assam has the maximum mean score, while Kerala has the least mean score.

#### 4. Observers feedback

**Table 1- Observers Feedback**

Score Key	Frequency					
	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6
Excellent	1	3	2	1	3	4
Very Good	6	7	6	6	3	5
Good	8	6	5	5	8	6
Average	1	1	4	5	3	2
Unsatisfactory	0	0	0	0	0	0

The quality of various sessions was assessed for 18 responses over three days. Most of the responses lie between very good and average category indicating that largely the observers were satisfied with the quality of the sessions. Further analysis could not be done due to lack of data.