

## **Impact of Peace Module on Adolescent's Knowledge for Living in Harmony**

**Dheeraj Kumar Pandey\***

**Prof. R. P. Shukla\*\***

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### **Keyword :**

Peace Module,  
Adolescents,  
Knowledge for Living in  
Harmony.

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### **Abstract**

*In the blind race of materialism, we are becoming more and more violent losing our human qualities with day by day and the early adolescents are more prone to being violent and aggressive. In this task well-planned wholesome education can only play crucial role in transforming the violent human nature and attitudes into humane and peaceful by nurturing moral and human values among them. This paper discusses in detail about the objective to study the impact of peace module on adolescents' knowledge for living in harmony in relation to their personal variables e.g. (a.) Sex; (b.) Area; (c.) Socio-economic Status (SES). In order to investigate, the researcher had selected 126 adolescents of 8<sup>th</sup> grade as a sample through Multi Stage Random Sampling and conducted an experiment using Pretest-Posttest Equivalent Groups Design. Further, he employed Knowledge Test for School Students (KTSS) for data collection and four way ANCOVA for analyzing the data. The main findings of the study were : (a.) implementation of peace module (IPM) influenced significantly to the knowledge of adolescents for living in harmony; (b.) it influenced more positively to the adolescents pertaining to female group in comparison to their male counterparts; (c.) IPM & sex; and IPM & SES differences are interacting significantly for the knowledge of adolescents for living in harmony.*

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### **Author Correspondence**

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#### **First Author**

Research Scholar,  
Faculty of Education (Kamachchha), BHU, Varanasi, U.P., India;  
Contact No. : +91 9451771774; E-mail : [dheerajpandey59@gmail.com](mailto:dheerajpandey59@gmail.com)

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#### **Second Author**

Professor,  
Faculty of Education (Kamachha), BHU, Varanasi, U.P., India;  
Contact No. : +91-0542-2361189 ; Email : [rpsukla1@gmail.com](mailto:rpsukla1@gmail.com)

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### **Introduction :**

Education is a lifelong, continuous going on process. It makes a human being civilized, cultured, competent, and productive citizen of the nation and society from human animal by developing his inherent capacities, increasing his knowledge and skills and modifying his behaviour. But the development of his inherent capacities, increase in his knowledge and skills and desired changes in his behaviour are not occurred accidentally or that is to say he does not become civilized, cultured, competent and a productive citizen of the nation and society from human animal at once, he achieves all of them in a desired direction and quantity step by step with special

strategies and by doing very hard work in the planned way for a longer period. We prescribe a certain degree of the development of his inherent capacities, increasement in his knowledge and skills and desirable changes in his behaviour for each particular period of time in that he is expected to achieve the same in the concerned particular period of time dividing this long period of time in some particular periods of time i.e. pre-primary, primary, secondary, senior-secondary and higher etc.

But in the educational point of view, primary particularly upper primary level is of the most important among all these periods of time because, most of the students of this period are in early adolescent age that is the most critical and hard period of time. According to Stanley Holl "Adolescence is a period of great stress, strain, storm and strike (*Saraswat, 2007*)."<sup>1</sup> During this period, many psycho-physical changes occurred in him. They feel emotionally unstable and imbalanced and the vulnerability of being violent and aggressive is very high in them. In a survey conducted for the position paper, 18 per cent of the children interviewed were found to take pleasure in various acts of violence. They enjoyed stoning little pups and kittens, breaking flower buds off plants, holding butterflies between their fingers, older children engaged in eve-teasing and ragging to the extent that it sometimes became fatal. (*Position Paper, NCERT, 2006*).

We are living in an age of unprecedented violence: locally, nationally, and globally. Theft, plundering, murder, terrorism, kidnapping, eve teasing, sexual assaults, home violence, corruption and social violence are the everyday phenomena of our day to day life and the increasing level of violence by the leaps and bounds in the society can be easily realized everywhere. Many researches and survey reports reveals that human nature becomes violent with day by day. If their claim is true, it's a very fatal tendency of human beings and an alarm to the peaceful coexistence of whole humanity as well as to all living and non-living beings. Here, one question arises in the mind of the researcher- what are the root causes of increasing violence with alarming rate in the society and how we transform the violent human nature and attitudes into humane and peaceful? Certainly, something is missing in our education system? It is producing highly specialized human animals or human robots, rather than highly specialized, efficient and competent human capital entrenched with human values and qualities. In this task well planned and proper education can only play crucial role in changing the violent human nature and attitudes into humane and peaceful by nurturing moral and human values among them.

In this regard many researches have been conducted in the area and they have created a lot of contradiction with their results. Where on one side some of the researchers reported that participation in co-curricular activities play a key role in students' academic success (*Stephens & Schaben, 2002; Huang & Chang, 2004; Hunt, 2005*), and contribute to bachelor's degree attainment (*Tan & Pope, 2007*). Students also realize the importance of developing overall competences, by joining co-curricular activities and working collaboratively with their student peers on academic work in order to gain hands-on experience (*Fung, Lee, & Chow, 2007*). Co-curricular activities were positively correlated to academic performance (*Hanks & Eckland, 1976; Camp, 1990*). While on the other side some of the researchers found no such correlation between co-

curricular involvement and academic performance (*Light, 1990; Hartnett, 1965*). One research finding suggested that only an academic curriculum would enhance academic performance (*Chambers & Schreiber, 2004*). It implied that the participation in some non-academic co-curricular activities might not directly benefit academic performance. *Black (2002)* suggested that involvement in student clubs and organizations might even distract students from their regular study, and not all activities were of benefit to academic performance. Here, the two opposing hypotheses have been proposed to explain the relationship between organized curricular & co-curricular activities and academic performance, academic success, attainment of proper knowledge, understanding, attitudes, skills and values etc. Whether organized curricular & co-curricular activities enhances academic performance or it distracts students from their regular study and degrades their academic performance. The researcher found the same case with the implementation of peace module. Therefore, the following question arose in the mind of the researcher :

- Whether implementation of peace module affects significantly to the knowledge of adolescents for living in harmony in relation to their personal variables?

In the light of above research question, the researcher has formulated the following objective:

- To study the impact of peace module on adolescents' knowledge for living in harmony in relation to their personal variables :
  - a. Sex;
  - b. Area;
  - c. Socio-economic Status;

#### **Operational Definition of the Technical Terms Used :**

- **Peace Module :** A module is a self-contained and independent unit of instruction with primary focus of well-defined objectives, to set this boundary. The substance of a module consists of everything needed by the learners to accomplish those objectives. For the purpose of present study, peace module refers to the module developed by the researcher himself. It contains three dimensions of living in harmony - a). Living in Harmony with Self; b). Living in Harmony with Society; c). Living in Harmony with Nature. For realizing the objectives of the module- to nurture appropriate knowledge, attitude and values for living in harmony; appropriate content, curricular & co- curricular activities have been constituted the module on Peace Education for living in harmony.
- **Living in Harmony :** For the purpose of present study living in harmony refers to the mental state or disposition which reflects through one's responses and behaviour pertaining to harmony and peace. It comprises three dimensions - a). Living in Harmony with Self; b). Living in Harmony with Society; c). Living in Harmony with Nature.

- **Socio-Economic Status:** Socio-economic status is obviously a blending of the two status – social and economic status. Socio-economic status would be a ranking of an individual by the society he lives in, in terms of his material belongings and cultural possessions along with the degree of respect, power and influence he wields. For the purpose of the present study, the following seven aspects of SES are : (a.) Social (b.) Family (c.) Education (d.) Profession (e.) Cast (f.) Total Assets (g.) Monthly Income.
- **Sex:** For the purpose of present study sex refers to the gender of adolescents. It comprises only male and female adolescents.
- **Area :** For the purpose of present study area refers to the locality of adolescents' domicile. It comprises both urban and rural areas as defined by the *Census of India (2011)*.
- **Adolescent:** For the purpose of present study, adolescent refers to all the 8<sup>th</sup> grade regular students studying in different upper primary schools/junior high schools, run/recognized by different basic/secondary education boards in Uttar Pradesh, India.

**Hypotheses of the Study :** For obtaining the above research objectives, the researcher has formulated the following null hypotheses :

H<sub>0.1</sub>. Implementation of peace module doesn't affect significantly to knowledge of adolescents for living in harmony in relation to their personal variables.

H<sub>0.1.1</sub>. There is no significant difference between the mean scores of adolescents' knowledge for living in harmony pertaining to experimental group and control group.

H<sub>0.1.2</sub>. There is no significant difference between the mean scores of adolescents' knowledge for living in harmony pertaining to male and female groups.

H<sub>0.1.3</sub>. There is no significant difference between the mean scores of adolescents' knowledge for living in harmony pertaining to urban and rural groups.

H<sub>0.1.4</sub>. There is no significant difference between the mean scores of adolescents' knowledge for living in harmony pertaining to high, middle and low socio-economic status groups.

H<sub>0.1.4.1</sub>. There is no significant difference between the mean scores of adolescents' knowledge for living in harmony pertaining to high and middle socio-economic status groups.

H<sub>0.1.4.2</sub>. There is no significant difference between the mean scores of adolescents' knowledge for living in harmony pertaining to middle and low socio-economic status groups.

H<sub>0.1.4.3</sub>. There is no significant difference between the mean scores of adolescents' knowledge for

living in harmony pertaining to high and low socio-economic status groups.

H<sub>0.1.5</sub>. Implementation of peace module and sex differences don't interact significantly for the knowledge of adolescents for living in harmony.

H<sub>0.1.6</sub>. Implementation of peace module and area differences don't interact significantly for the knowledge of adolescents for living in harmony.

H<sub>0.1.7</sub>. Implementation of peace module and socio-economic status differences don't interact significantly for the knowledge of adolescents for living in harmony.

H<sub>0.1.8</sub>. Differences of sex and area don't interact significantly for the knowledge of adolescents for living in harmony.

H<sub>0.1.9</sub>. Sex and socio-economic status differences don't interact significantly for the knowledge of adolescents for living in harmony.

H<sub>0.1.10</sub>. Area and socio-economic status differences don't interact significantly for the knowledge of adolescents for living in harmony.

H<sub>0.1.11</sub>. Implementation of peace module, sex and area differences don't interact significantly for the knowledge of adolescents for living in harmony.

H<sub>0.1.12</sub>. Implementation of peace module, sex, and socio-economic status differences don't interact significantly for the knowledge of adolescents for living in harmony.

H<sub>0.1.13</sub>. Implementation of peace module, area, and socio-economic status differences don't interact significantly for the knowledge of adolescents for living in harmony.

H<sub>0.1.14</sub>. Sex, area, and socio-economic status differences don't interact significantly for the knowledge of adolescents for living in harmony.

H<sub>0.1.15</sub>. Implementation of peace module, sex, area and socio-economic status differences don't interact significantly for the knowledge of adolescents for living in harmony.

### **Research Design:**

In the present study the Pre-test-post-test Equivalent Groups Design has been used. The notation of this design is as follows :

R	O <sub>1</sub>	X	O <sub>2</sub>	O <sub>1, O<sub>3</sub></sub>	= Pre tests
R	O <sub>3</sub>	C	O <sub>4</sub>	O <sub>2, O<sub>4</sub></sub>	= Post tests

### **Research Method of the Study:**

In the present study, experimental research method has been used and the researcher has conducted an experiment to examine the impact of peace module on adolescents' knowledge for

living in harmony.

### **Population of the Study :**

Population of the present study consists of all the 8<sup>th</sup> class regular students studying in all the types of upper primary schools/junior high schools, including public/private, govt., granted, non-granted, boys, girls, co-education, boarding, non-boarding, Hindi medium and English medium, run/recognised by different basic/secondary education boards in Uttar Pradesh, India.

### **Sample of the Study :**

In the present research study, the researcher has selected a sample of 126 students studying in 8<sup>th</sup> class in two stages – in the first stage, the researcher has randomly selected one district out of all the 75 districts of U.P., India; and in the second stage, he has randomly selected Chitrakoot Public School, an upper primary school, recognized by Basic Shiksha Parishad, Uttar Pradesh, India from the list of all the upper primary/junior high schools situated in District- Chitrakoot, U.P. After that, all the students studying in class VIII of the same school have been taken as a sample. Sampling design of the present study is as follows:

**Table – I : Selected Adolescents as Sample of the Study**

Different Stratas	Boys												Girls												Total		
	Urban						Rural						Urban						Rural								
	13 years Age			14 years Age			13 years Age			14 years Age			13 years Age			14 years Age			13 years Age			14 years Age					
	Group		Group		Group		Group		Group		Group		Group		Group		Group		Group		Group						
	High (SES)	Middle (SES)	Low (SES)	High (SES)	Middle (SES)	Low (SES)	High (SES)	Middle (SES)	Low (SES)	High (SES)	Middle (SES)	Low (SES)	High (SES)	Middle (SES)	Low (SES)	High (SES)	Middle (SES)	Low (SES)	High (SES)	Middle (SES)	Low (SES)	High (SES)	Middle (SES)	Low (SES)			
Experimental Group	2	4	2	3	4	2	2	3	1	2	5	2	2	4	2	4	5	2	2	3	1	2	3	1	63		
Control Group	2	3	2	3	5	2	2	3	2	2	5	1	3	4	2	3	5	2	2	2	1	2	4	1	63		
Total	4	7	4	6	9	4	4	6	3	4	10	3	5	8	4	7	10	4	4	5	2	4	7	2	126		

### **Procedure of the Study :**

After sampling, the researcher has administered four tests- Mental Health Battery (MHB), Socio-Economic Status Scale (SESS), Intelligence Test for School Students (ITSS), Knowledge Test for School Students (KTSS), on all subjects who have been selected as a sample for the study and categorized them into different groups on the basis of their personal variables – age, sex, area, socio-economic status, intelligence scores, mental health scores and pre-test knowledge scores. Further, he has randomly assigned all the subjects from each group into experimental and control groups through matched randomization and group matching randomization on the basis of tossing

a coin in the following way :

**Table – II : Random Assignment of all the Subjects into Experimental and Control Group**

Control Group	Experimental Group						Different Stratas	
	Pre-test Knowledge Scores		I.Q. Scores		Mental Health Scores			
	N	Scores				Scores		
$\Sigma M=17.50$ $\Sigma \sigma=3.536$	2	$\Sigma M=32.50$ $\Sigma \sigma=4.950$	$\Sigma M=23.00$ $\Sigma \sigma=2.728$	$\Sigma M=118.50$ $\Sigma \sigma=9.192$	$\Sigma M=118.50$ $\Sigma \sigma=9.192$	High (SES)		
$\Sigma M=110.00$ $\Sigma \sigma=6.083$	4	$\Sigma M=21.00$ $\Sigma \sigma=8.124$	$\Sigma M=118.25$ $\Sigma \sigma=8.124$	$\Sigma M=108.50$ $\Sigma \sigma=8.185$	$\Sigma M=108.50$ $\Sigma \sigma=8.185$	Middle (SES)		
$\Sigma M=104.50$ $\Sigma \sigma=9.192$	2	$\Sigma M=16.00$ $\Sigma \sigma=1.414$	$\Sigma M=14.50$ $\Sigma \sigma=1.414$	$\Sigma M=95.50$ $\Sigma \sigma=3.536$	$\Sigma M=95.50$ $\Sigma \sigma=3.536$	Low (SES)		
$\Sigma M=114.00$ $\Sigma \sigma=7.937$	3	$\Sigma M=26.00$ $\Sigma \sigma=6.245$	$\Sigma M=114.67$ $\Sigma \sigma=9.292$	$\Sigma M=116.33$ $\Sigma \sigma=5.859$	$\Sigma M=116.33$ $\Sigma \sigma=5.859$	High (SES)		
$\Sigma M=111.00$ $\Sigma \sigma=12.268$	4	$\Sigma M=21.00$ $\Sigma \sigma=6.976$	$\Sigma M=109.50$ $\Sigma \sigma=14.526$	$\Sigma M=110.00$ $\Sigma \sigma=10.296$	$\Sigma M=110.00$ $\Sigma \sigma=10.296$	Middle (SES)		
$\Sigma M=93.00$ $\Sigma \sigma=1.414$	2	$\Sigma M=15.00$ $\Sigma \sigma=2.828$	$\Sigma M=99.00$ $\Sigma \sigma=7.071$	$\Sigma M=94.50$ $\Sigma \sigma=6.364$	$\Sigma M=94.50$ $\Sigma \sigma=6.364$	Low (SES)		
$\Sigma M=118.50$ $\Sigma \sigma=9.678$	2	$\Sigma M=33.00$ $\Sigma \sigma=8.485$	$\Sigma M=120.00$ $\Sigma \sigma=15.556$	$\Sigma M=125.00$ $\Sigma \sigma=2..828$	$\Sigma M=125.00$ $\Sigma \sigma=2..828$	High (SES)		
$\Sigma M=119.13$ $\Sigma \sigma=4.583$	3	$\Sigma M=24.00$ $\Sigma \sigma=5.00$	$\Sigma M=111.67$ $\Sigma \sigma=4.933$	$\Sigma M=119.33$ $\Sigma \sigma=3.786$	$\Sigma M=119.33$ $\Sigma \sigma=3.786$	Middle (SES)		
$\Sigma M=106.00$ $\Sigma \sigma=17.349$	1	$\Sigma M=15.00$ $\Sigma \sigma= -$	$\Sigma M=95.00$ $\Sigma \sigma= -$	$\Sigma M=100.00$ $\Sigma \sigma= -$	$\Sigma M=100.00$ $\Sigma \sigma= -$	Low (SES)		
$\Sigma M=113.00$ $\Sigma \sigma=13.367$	2	$\Sigma M=17.00$ $\Sigma \sigma=5.657$	$\Sigma M=110.00$ $\Sigma \sigma=8.385$	$\Sigma M=112.00$ $\Sigma \sigma=14.142$	$\Sigma M=112.00$ $\Sigma \sigma=14.142$	High (SES)		
$\Sigma M=120.83$ $\Sigma \sigma=3.656$	5	$\Sigma M=25.00$ $\Sigma \sigma=4.00$	$\Sigma M=118.40$ $\Sigma \sigma=8.414$	$\Sigma M=122.80$ $\Sigma \sigma=4.438$	$\Sigma M=122.80$ $\Sigma \sigma=4.438$	Middle (SES)		
$\Sigma M=117.00$ $\Sigma \sigma=2.828$	2	$\Sigma M=17.50$ $\Sigma \sigma=0.707$	$\Sigma M=111.50$ $\Sigma \sigma=6.364$	$\Sigma M=110.50$ $\Sigma \sigma=0.707$	$\Sigma M=110.50$ $\Sigma \sigma=0.707$	Low (SES)		
$\Sigma M=118.17$ $\Sigma \sigma=7.679$	2	$\Sigma M=31.5$ $\Sigma \sigma=0.707$	$\Sigma M=128.50$ $\Sigma \sigma=2.121$	$\Sigma M=124.00$ $\Sigma \sigma=1.414$	$\Sigma M=124.00$ $\Sigma \sigma=1.414$	High (SES)		
$\Sigma M=116.64$ $\Sigma \sigma=6.485$	4	$\Sigma M=26.75$ $\Sigma \sigma=1.708$	$\Sigma M=122.75$ $\Sigma \sigma=4.573$	$\Sigma M=122.50$ $\Sigma \sigma=5.066$	$\Sigma M=122.50$ $\Sigma \sigma=5.066$	Middle (SES)		
$\Sigma M=105.40$ $\Sigma \sigma=13.126$	2	$\Sigma M=17.00$ $\Sigma \sigma=7.071$	$\Sigma M=100.00$ $\Sigma \sigma=12.728$	$\Sigma M=96.00$ $\Sigma \sigma=9.799$	$\Sigma M=96.00$ $\Sigma \sigma=9.799$	Low (SES)		
$\Sigma M=122.83$ $\Sigma \sigma=2.639$	4	$\Sigma M=28.75$ $\Sigma \sigma=4.573$	$\Sigma M=119.75$ $\Sigma \sigma=8.098$	$\Sigma M=123.00$ $\Sigma \sigma=3.367$	$\Sigma M=123.00$ $\Sigma \sigma=3.367$	High (SES)		
$\Sigma M=120.67$ $\Sigma \sigma=4.899$	5	$\Sigma M=26.20$ $\Sigma \sigma=4.658$	$\Sigma M=121.80$ $\Sigma \sigma=4.324$	$\Sigma M=119.00$ $\Sigma \sigma=7.583$	$\Sigma M=119.00$ $\Sigma \sigma=7.583$	Middle (SES)		
$\Sigma M=105.25$ $\Sigma \sigma=12.685$	2	$\Sigma M=20.50$ $\Sigma \sigma=0.707$	$\Sigma M=100.50$ $\Sigma \sigma=0.707$	$\Sigma M=109.00$ $\Sigma \sigma=1.414$	$\Sigma M=109.00$ $\Sigma \sigma=1.414$	Low (SES)		
$\Sigma M=118.17$ $\Sigma \sigma=7.679$	2	$\Sigma M=31.50$ $\Sigma \sigma=3.536$	$\Sigma M=126.50$ $\Sigma \sigma=4.95$	$\Sigma M=125.50$ $\Sigma \sigma=0.707$	$\Sigma M=125.50$ $\Sigma \sigma=0.707$	High (SES)		
$\Sigma M=116.64$ $\Sigma \sigma=6.485$	3	$\Sigma M=25.67$ $\Sigma \sigma=2.082$	$\Sigma M=114.67$ $\Sigma \sigma=3.512$	$\Sigma M=119.00$ $\Sigma \sigma=2.00$	$\Sigma M=119.00$ $\Sigma \sigma=2.00$	Middle (SES)		
$\Sigma M=105.40$ $\Sigma \sigma=13.126$	1	$\Sigma M=19.00$ $\Sigma \sigma= -$	$\Sigma M=03.00$ $\Sigma \sigma= -$	$\Sigma M=107.00$ $\Sigma \sigma= -$	$\Sigma M=107.00$ $\Sigma \sigma= -$	Low (SES)		
$\Sigma M=113.00$ $\Sigma \sigma=13.367$	2	$\Sigma M=17.50$ $\Sigma \sigma=4.950$	$\Sigma M=06.0$ $\Sigma \sigma=14.142$	$\Sigma M=108.50$ $\Sigma \sigma=12.263$	$\Sigma M=108.50$ $\Sigma \sigma=12.263$	High (SES)		
$\Sigma M=120.83$ $\Sigma \sigma=3.656$	3	$\Sigma M=25.67$ $\Sigma \sigma=3.512$	$\Sigma M=119.33$ $\Sigma \sigma=6.429$	$\Sigma M=123.33$ $\Sigma \sigma=3.786$	$\Sigma M=123.33$ $\Sigma \sigma=3.786$	Middle (SES)		
$\Sigma M=117.00$ $\Sigma \sigma=2.828$	1	$\Sigma M=24.00$ $\Sigma \sigma= -$	$\Sigma M=04.00$ $\Sigma \sigma= -$	$\Sigma M=113.00$ $\Sigma \sigma= -$	$\Sigma M=113.00$ $\Sigma \sigma= -$	Low (SES)		
$\Sigma M=115.19$ $\Sigma \sigma=10.096$	63	$\Sigma M=23.90$ $\Sigma \sigma=6.377$	$\Sigma M=114.98$ $\Sigma \sigma=10.979$	$\Sigma M=115.19$ $\Sigma \sigma=10.601$	$\Sigma M=115.19$ $\Sigma \sigma=10.601$		Total	

		Total		I.Q. Scores		Mental Health Scores		N	Pre-test Knowledge Scores		I.Q. Scores	
N	Pre-test Knowledge Scores											
4	$\Sigma M=32.50$	$\Sigma \sigma=3.109$	$\Sigma M=123.00$	$\Sigma \sigma=9.832$	$\Sigma M=118.00$	$\Sigma \sigma=5.715$	$\Sigma M=32.50$	$\Sigma \sigma=2.121$	$\Sigma M=123.00$	$\Sigma \sigma=11.314$		
7	$\Sigma M=20.71$	$\Sigma \sigma=7.204$	$\Sigma M=116.57$	$\Sigma \sigma=9.727$	$\Sigma M=109.14$	$\Sigma \sigma=6.817$	$\Sigma M=20.33$	$\Sigma \sigma=7.506$	$\Sigma M=114.33$	$\Sigma \sigma=8.622$		
4	$\Sigma M=17.75$	$\Sigma \sigma=4.272$	$\Sigma M=113.50$	$\Sigma \sigma=12.871$	$\Sigma M=100.00$	$\Sigma \sigma=7.703$	$\Sigma M=19.50$	$\Sigma \sigma=6.364$	$\Sigma M=112.50$	$\Sigma \sigma=13.435$		
6	$\Sigma M=25.33$	$\Sigma \sigma=6.470$	$\Sigma M=116.83$	$\Sigma \sigma=7.414$	$\Sigma M=115.17$	$\Sigma \sigma=6.369$	$\Sigma M=24.67$	$\Sigma \sigma=8.021$	$\Sigma M=119.90$	$\Sigma \sigma=6.083$		
9	$\Sigma M=20.67$	$\Sigma \sigma=5.431$	$\Sigma M=109.33$	$\Sigma \sigma=12.42$	$\Sigma M=110.56$	$\Sigma \sigma=10.737$	$\Sigma M=20.40$	$\Sigma \sigma=4.722$	$\Sigma M=109.20$	$\Sigma \sigma=12.256$		
4	$\Sigma M=15.00$	$\Sigma \sigma=2.309$	$\Sigma M=98.75$	$\Sigma \sigma=4.573$	$\Sigma M=93.75$	$\Sigma \sigma=3.862$	$\Sigma M=15.00$	$\Sigma \sigma=2.828$	$\Sigma M=98.50$	$\Sigma \sigma=3.536$		
4	$\Sigma M=27.50$	$\Sigma \sigma=8.068$	$\Sigma M=117.33$	$\Sigma \sigma=12.941$	$\Sigma M=120.67$	$\Sigma \sigma=8.311$	$\Sigma M=24.75$	$\Sigma \sigma=7.365$	$\Sigma M=116.00$	$\Sigma \sigma=13.832$		
6	$\Sigma M=24.27$	$\Sigma \sigma=3.319$	$\Sigma M=114.82$	$\Sigma \sigma=6.178$	$\Sigma M=119.18$	$\Sigma \sigma=4.40$	$\Sigma M=24.38$	$\Sigma \sigma=2.925$	$\Sigma M=116.00$	$\Sigma \sigma=6.459$		
3	$\Sigma M=17.50$	$\Sigma \sigma=5.568$	$\Sigma M=103.72$	$\Sigma \sigma=12.148$	$\Sigma M=104.50$	$\Sigma \sigma=14.480$	$\Sigma M=18.33$	$\Sigma \sigma=6.506$	$\Sigma M=106.67$	$\Sigma \sigma=13.051$		
4	$\Sigma M=17.00$	$\Sigma \sigma=5.657$	$\Sigma M=110.00$	$\Sigma \sigma=18.358$	$\Sigma M=112.00$	$\Sigma \sigma=14.142$	$\Sigma M=25.25$	$\Sigma \sigma=8.958$	$\Sigma M=115.50$	$\Sigma \sigma=15.11$		
10	$\Sigma M=25.00$	$\Sigma \sigma=4.00$	$\Sigma M=118.40$	$\Sigma \sigma=8.414$	$\Sigma M=122.80$	$\Sigma \sigma=4.338$	$\Sigma M=24.50$	$\Sigma \sigma=2.429$	$\Sigma M=117.17$	$\Sigma \sigma=3.971$		
3	$\Sigma M=17.50$	$\Sigma \sigma=0.707$	$\Sigma M=111.54$	$\Sigma \sigma=6.364$	$\Sigma M=110.50$	$\Sigma \sigma=0.707$	$\Sigma M=22.50$	$\Sigma \sigma=2.121$	$\Sigma M=110.50$	$\Sigma \sigma=7.778$		
5	$\Sigma M=31.50$	$\Sigma \sigma=0.707$	$\Sigma M=128.50$	$\Sigma \sigma=2.121$	$\Sigma M=124.00$	$\Sigma \sigma=1.414$	$\Sigma M=27.33$	$\Sigma \sigma=7.033$	$\Sigma M=118.33$	$\Sigma \sigma=12.388$		
8	$\Sigma M=26.75$	$\Sigma \sigma=1.708$	$\Sigma M=122.75$	$\Sigma \sigma=4.573$	$\Sigma M=122.50$	$\Sigma \sigma=5.066$	$\Sigma M=23.27$	$\Sigma \sigma=4.563$	$\Sigma M=115.55$	$\Sigma \sigma=6.684$		
4	$\Sigma M=17.00$	$\Sigma \sigma=7.0708$	$\Sigma M=100.00$	$\Sigma \sigma=12.728$	$\Sigma M=96.00$	$\Sigma \sigma=19.799$	$\Sigma M=18.80$	$\Sigma \sigma=5.630$	$\Sigma M=109.00$	$\Sigma \sigma=11.853$		
7	$\Sigma M=29.60$	$\Sigma \sigma=3.373$	$\Sigma M=122.80$	$\Sigma \sigma=6.579$	$\Sigma M=122.90$	$\Sigma \sigma=2.767$	$\Sigma M=30.17$	$\Sigma \sigma=2.639$	$\Sigma M=124.83$	$\Sigma \sigma=5.115$		
10	$\Sigma M=26.00$	$\Sigma \sigma=3.742$	$\Sigma M=119.93$	$\Sigma \sigma=5.370$	$\Sigma M=120.07$	$\Sigma \sigma=5.757$	$\Sigma M=25.89$	$\Sigma \sigma=3.444$	$\Sigma M=118.89$	$\Sigma \sigma=5.840$		
4	$\Sigma M=20.00$	$\Sigma \sigma=3.162$	$\Sigma M=102.33$	$\Sigma \sigma=7.146$	$\Sigma M=106.50$	$\Sigma \sigma=10.035$	$\Sigma M=19.75$	$\Sigma \sigma=4.031$	$\Sigma M=103.25$	$\Sigma \sigma=9.032$		
4	$\Sigma M=31.50$	$\Sigma \sigma=3.536$	$\Sigma M=126.50$	$\Sigma \sigma=4.95$	$\Sigma M=125.50$	$\Sigma \sigma=0.707$	$\Sigma M=24.75$	$\Sigma \sigma=7.365$	$\Sigma M=116.00$	$\Sigma \sigma=13.832$		
5	$\Sigma M=25.67$	$\Sigma \sigma=2.082$	$\Sigma M=114.67$	$\Sigma \sigma=3.512$	$\Sigma M=119.00$	$\Sigma \sigma=2.00$	$\Sigma M=24.38$	$\Sigma \sigma=2.925$	$\Sigma M=110.00$	$\Sigma \sigma=6.459$		
2	$\Sigma M=19.00$	$\Sigma \sigma= -$	$\Sigma M=103.00$	$\Sigma \sigma= -$	$\Sigma M=107.00$	$\Sigma \sigma= -$	$\Sigma M=18.33$	$\Sigma \sigma=6.506$	$\Sigma M=106.67$	$\Sigma \sigma=13.051$		
4	$\Sigma M=22.67$	$\Sigma \sigma=8.311$	$\Sigma M=112.33$	$\Sigma \sigma=14.18$	$\Sigma M=111.50$	$\Sigma \sigma=12.865$	$\Sigma M=25.25$	$\Sigma \sigma=8.958$	$\Sigma M=115.50$	$\Sigma \sigma=15.111$		
7	$\Sigma M=24.89$	$\Sigma \sigma=2.667$	$\Sigma M=117.89$	$\Sigma \sigma=4.622$	$\Sigma M=121.67$	$\Sigma \sigma=3.674$	$\Sigma M=24.50$	$\Sigma \sigma=2.429$	$\Sigma M=117.17$	$\Sigma \sigma=3.971$		
2	$\Sigma M=23.00$	$\Sigma \sigma=1.732$	$\Sigma M=108.33$	$\Sigma \sigma=6.658$	$\Sigma M=115.67$	$\Sigma \sigma=3.055$	$\Sigma M=22.50$	$\Sigma \sigma=2.121$	$\Sigma M=110.50$	$\Sigma \sigma=7.778$		
126	$\Sigma M=23.90$	$\Sigma \sigma=6.042$	$\Sigma M=114.98$	$\Sigma \sigma=10.491$	$\Sigma M=115.19$	$\Sigma \sigma=10.310$	$\Sigma M=23.90$	$\Sigma \sigma=5.738$	$\Sigma M=114.98$	$\Sigma \sigma=10.068$		

After random assignment all subjects in to experimental & control group, the researcher has provided treatment to experimental group in the form of implementation of 'Peace Module' by their class teacher one period every day up to 91 working days and placebo to the control group in the form of teaching them their usual subjects as per the schedule of the class as well as of the school by their class teacher one period every day in the same period of the class up to 91 working days. After completing 91 working days, he got post-test scores of the adolescents of both groups administering Knowledge Test for School Students (KTSS). Then he analyzed the data with the help of SPSS using four way ANCOVA (Analysis of Covariance) and used post-test knowledge scores as within subject variable/dependent

variable; pre-test knowledge scores, intelligence scores, mental health scores as covariates; and the variables like – implementation of peace module, sex, area, socio-economic status as independent variables.

### Tools Used in the Study :

In the present study, the researcher has used the following standardized tools :

- Mental Health Battery (MHB), constructed and standardized by Prof. Arun Kumar Singh and Dr. Alpana Sen Gupta;
- Socio-Economic Status Scale (SESS), constructed and standardized by Dr. R. L. Bharadwaj;
- Intelligence Test for School Students (ITSS), constructed and standardized by the researcher himself;
- Knowledge Test for School Students (KTSS), constructed and standardized by the researcher himself;

### Statistical Analysis of the Data :

**Objective No. 1.** To study the impact of peace module on adolescents' knowledge for living in harmony in relation to their personal variables :

- Sex;
- Area;
- Socio-economic Status;

**Table –III: Showing the Mean (M) and Standard Deviation ( $\sigma$ ) of Adolescents' Posttest Knowledge Scores Falling in the Different Strata of Implementation of Peace Module, Sex, Area, Socio-Economic Status**

Factors and its stages		Different stages of Factor B (Sex)												$\Sigma$	
		B <sub>1</sub> (Male)						B <sub>2</sub> (Female)							
		Different Stages of Factor C (Area)						Different Stages of Factor C (Area)							
		C <sub>1</sub> (Urban Area)			C <sub>2</sub> (Rural Area)			C <sub>1</sub> (Urban Area)			C <sub>2</sub> (Rural Area)				
		Different Stages of Factor D (Socio-Economic Status)			Different Stages of Factor D (Socio-Economic Status)			Different Stages of Factor D (Socio-Economic Status)			Different Stages of Factor D (Socio-Economic Status)				
		D <sub>1</sub> High (SES)	D <sub>2</sub> Middle (SES)	D <sub>3</sub> Low (SES)	D <sub>1</sub> High (SES)	D <sub>2</sub> Middle (SES)	D <sub>3</sub> Low (SES)	D <sub>1</sub> High (SES)	D <sub>2</sub> Middle (SES)	D <sub>3</sub> Low (SES)	D <sub>1</sub> High (SES)	D <sub>2</sub> Middle (SES)	D <sub>3</sub> Low (SES)		
1		2	3	4	5	6	7	8	9	10	11	12	13	14	
Different stages of factor A A <sub>1</sub> (Experimental Group)	N=5	N=8	N=4	N=4	N=8	N=3	N=6	N=9	N=4	N=4	N=6	N=2	N=63		
	$\Sigma M=6$ 1.20	$\Sigma M=5$ 6.38	$\Sigma M=4$ 4.50	$\Sigma M=54$ .75	$\Sigma M=5$ 3.75	$\Sigma M=4$ 6.33	$\Sigma M=6$ 0.83	$\Sigma M=5$ 53.00	$\Sigma M=4$ 1.75	$\Sigma M=56$ .50	$\Sigma M=5$ 3.83	$\Sigma M=4$ 5.00	$\Sigma M=53$ .51		
	$\Sigma \sigma=5.$ 167	$\Sigma \sigma=7.$ 249	$\Sigma \sigma=4.$ 796	$\Sigma \sigma=19.$ 619	$\Sigma \sigma=7.$ 592	$\Sigma \sigma=2.$ 517	$\Sigma \sigma=6.$ 524	$\Sigma \sigma=4.$ 183	$\Sigma \sigma=6.$ 131	$\Sigma \sigma=13.$ 00	$\Sigma \sigma=4.$ 665	$\Sigma \sigma=4.$ 243	$\Sigma \sigma=9.0$ 87		

A <sub>2</sub> (Control Group)	N=5	N=8	N=4	N=4	N=8	N=3	N=6	N=9	N=4	N=4	N=6	N=2	N=63
	ΣM=3 0.80	ΣM=2 1.88	ΣM=1 8.50	ΣM=27 .50	ΣM=2 5.63	ΣM=2 1.00	ΣM=3 2.33	ΣM=2 7.11	ΣM=2 3.00	ΣM=27 .25	ΣM=2 6.50	ΣM=2 4.00	ΣM=25 .83
	Σσ=7. 563	Σσ=6. 266	Σσ=2. 646	Σσ=8.6 6	Σσ=3. 114	Σσ=7. 00	Σσ=3. 011	Σσ=4. 106	Σσ=4. 83	Σσ=7.7 19	Σσ=3. 271	Σσ=0. 00	Σσ=6.0 39
Σ	N=10 6.00	N=16 9.13	N=8 1.50	N=8 .12	N=16 9.69	N=6 3.67	N=12 6.58	N=18 0.06	N=8 2.38	N=8 .88	N=12 0.17	N=4 4.50	N=126 .67
	Σσ=17 .146	Σσ=18 .980	Σσ=14 .353	Σσ=20. 230	Σσ=15 .568	Σσ=14 .652	Σσ=15 .652	Σσ=13 .913	Σσ=11 .250	Σσ=18. 504	Σσ=14 .782	Σσ=12 .369	Σσ=15. 88

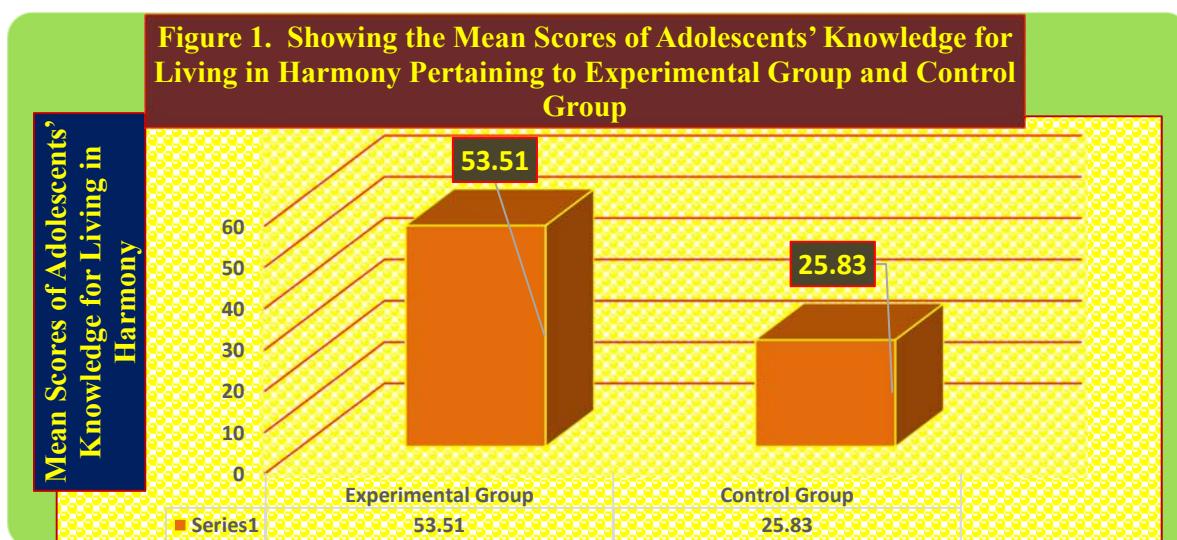
**Table –IV : Summary Table of Four Way Analysis of Covariance (ANCOVA) of Adolescent's Post-test Knowledge Scores at Different Stages of Implementation of Peace Module, Sex, Area, Socio-Economic Status**

Source	Type III Sum of Squares	df	Mean Square	F	Level of Significance	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	30339.385 <sup>a</sup>	26	1166.899	97.850	.05	.963	2544.097	1.000
Intercept	11.708	1	11.708	.982	.324	.010	.982	.165
Pre-test Knowledge Scores	467.255	1	467.255	39.181	.05	.284	39.181	1.000
I.Q	41.166	1	41.166	3.452	.066	.034	3.452	.452
Mental Health	34.482	1	34.482	2.892	.092	.028	2.892	.391
Implementation of Peace Module	19488.319	1	19488.319	1634.185	.05	.943	1634.185	1.000
Sex	94.252	1	94.252	7.904	.05	.074	7.904	.795
Area	17.759	1	17.759	1.489	.225	.015	1.489	.227
Socio-economic Status	52.814	2	26.407	2.214	.115	.043	4.429	.442
Implementation of Peace Module * Sex	67.960	1	67.960	5.699	.05	.054	5.699	.657
Implementation of Peace Module * Area	4.993	1	4.993	.419	.519	.004	.419	.098
Implementation of Peace Module * Socio-economic Status	76.925	2	38.462	3.225	.05	.061	6.450	.603
Sex * Area	31.423	1	31.423	2.635	.108	.026	2.635	.362

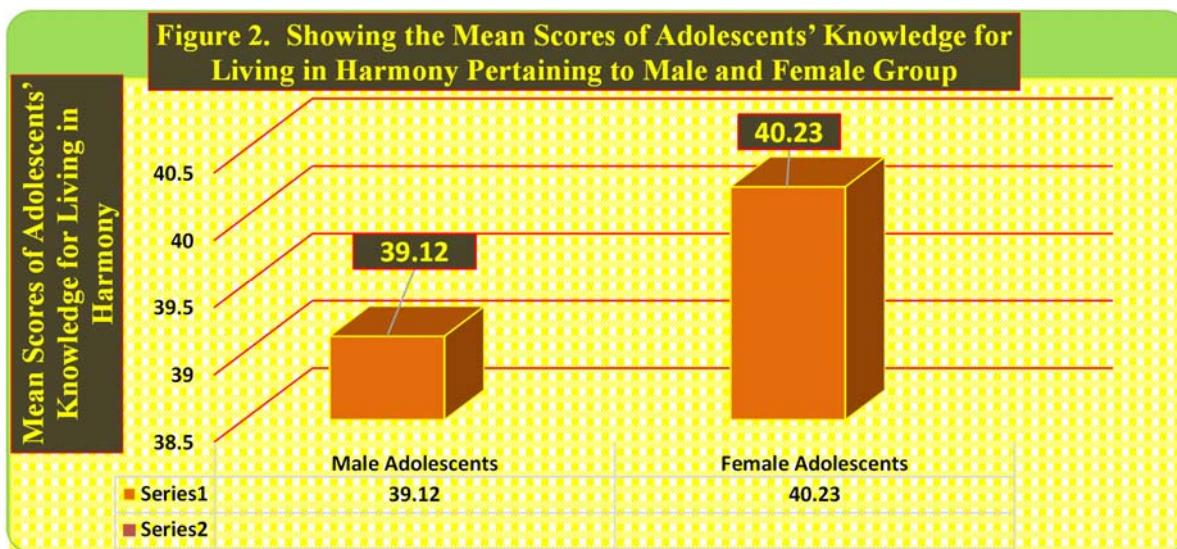
<b>Sex * Socio-economic Status</b>	<b>34.586</b>	<b>2</b>	<b>17.293</b>	<b>1.450</b>	<b>.239</b>	<b>.028</b>	<b>2.900</b>	<b>.304</b>
<b>Area * Socio-economic Status</b>	<b>4.794</b>	<b>2</b>	<b>2.397</b>	<b>.201</b>	<b>.818</b>	<b>.004</b>	<b>.402</b>	<b>.081</b>
<b>Implementation of Peace</b>								
<b>Module * Sex * Area</b>	<b>39.558</b>	<b>1</b>	<b>39.558</b>	<b>3.317</b>	<b>.072</b>	<b>.032</b>	<b>3.317</b>	<b>.438</b>
<b>Implementation of Peace</b>								
<b>Module * Sex * Socio-economic Status</b>	<b>51.962</b>	<b>2</b>	<b>25.981</b>	<b>2.179</b>	<b>.119</b>	<b>.042</b>	<b>4.357</b>	<b>.436</b>
<b>Implementation of Peace</b>								
<b>Module * Area * Socio-economic Status</b>	<b>13.332</b>	<b>2</b>	<b>6.666</b>	<b>.559</b>	<b>.574</b>	<b>.011</b>	<b>1.118</b>	<b>.140</b>
<b>Sex * Area * Socio-economic Status</b>	<b>56.908</b>	<b>2</b>	<b>28.454</b>	<b>2.386</b>	<b>.097</b>	<b>.046</b>	<b>4.772</b>	<b>.472</b>
<b>Implementation of Peace</b>								
<b>Module * Sex * Area * Socio-economic Status</b>	<b>8.398</b>	<b>2</b>	<b>4.199</b>	<b>.352</b>	<b>.704</b>	<b>.007</b>	<b>.704</b>	<b>.105</b>
<b>Error</b>	<b>1180.615</b>	<b>99</b>	<b>11.925</b>					
<b>Total</b>	<b>229774.000</b>	<b>126</b>						
<b>Corrected Total</b>	<b>31520.000</b>	<b>125</b>						

- ❖ *R Squared = .963 (Adjusted R Squared = .953);*
- ❖ *Computed using alpha = .05;*
- ❖ *Table value of F-ratio is F.05= 3.94 and F.01= 6.90 for df = (1,99);*
- ❖ *Table value of F-ratio is F.<sub>.05</sub> = 3.09, and F.<sub>.01</sub> = 4.82 for df = (2,99)*

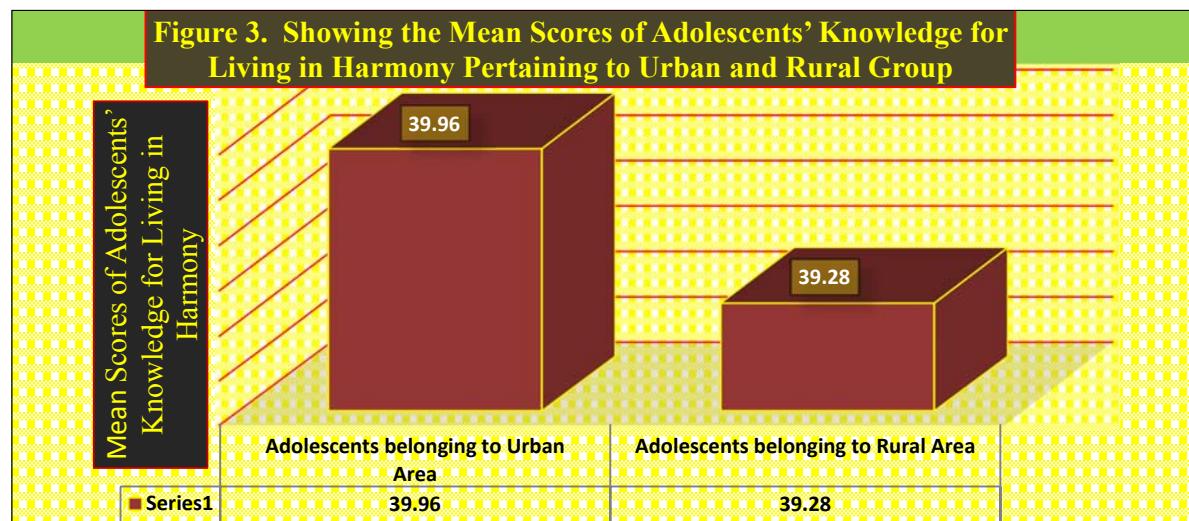
The above **Table-IV** denotes that four way analysis of covariance (**ANCOVA**) has been applied to the adolescents' post-test knowledge scores at different stages of implementation of peace module, sex, area, socio-economic status using adolescents' post-test knowledge scores as within subject variable/dependent variable; pre-test knowledge scores, intelligence scores, mental health scores as covariates; and the variables like – implementation of peace module, sex, area, socio-economic status as independent variables. The adolescents' post-test knowledge scores have been divided in the different groups in accordance with their implementation of peace module, sex, area, socio-economic status. The results of the four way analysis of covariance shows that:



The above **Table-III & IV** and **Figure- 1** shows that the mean scores of adolescents' knowledge for living in harmony pertaining to experimental group (**53.50794**) is much higher than that of control group (**25.8254**). The calculated value of  $F(1, 99) = 1634.185$  ( $P < .05$ ) for the main effect of Factor A (Implementation of Peace Module) far exceeds the critical value ( $F_{.05} = 3.94$ ), therefore F- ratio is significant at **.05** level. As indicated by the eta squared value (**.943**) that the main effect of implementation of peace module accounts for **94.3%** of the variance in total. Therefore null hypothesis is rejected and research hypothesis that is the mean scores of adolescents' knowledge for living in harmony pertaining to experimental group is significantly different from that of control group, is accepted.

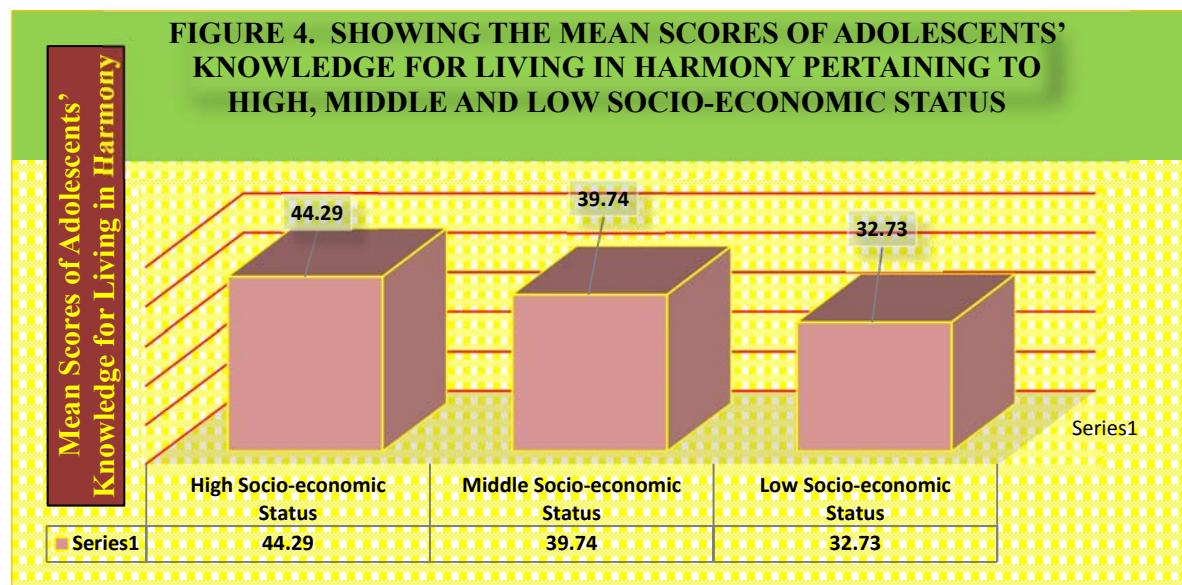


The above **Table-III & IV** and **Figure- 2** shows that the mean scores of adolescents' knowledge for living in harmony pertaining to male group (**39.12**) is less than that of female group (**40.23**). The calculated value of  $F(1, 99) = 7.904$  ( $P < .05$ ) for the main effect of Factor B (Sex) far exceeds the critical value ( $F_{.05} = 3.94$ ), therefore F- ratio is significant at **.05** level. As indicated by the eta squared value (**.074**) that the main effect of sex accounts for **7.4%** of the variance in total. Therefore null hypothesis is rejected and research hypothesis that is the mean scores of adolescents' knowledge for living in harmony pertaining to male group is significantly different from that of female group, is accepted.



The above **Table-III & IV** and **Figure- 3** shows that the mean scores of adolescents' knowledge for living in harmony pertaining to urban group (**39.96**) is a little higher or almost equal to that of rural group (**39.28**). The calculated value of  $F(1, 99) = 1.489$  ( $P > .05$ ) for the main effect of Factor C (Area) is very less than the critical value ( $F_{.05} = 3.94$ ), therefore F- ratio is not

significant at .05 level. As indicated by the eta squared value (.015) that the main effect of area accounts for only 1.5% of the variance in total. Therefore the null hypothesis that is the mean scores of adolescents' knowledge for living in harmony pertaining to urban group is not significantly different from that of rural group is accepted and the observed difference between them may be due to sampling error.



The above Table- IV shows that the calculated value of  $F(2, 99) = 2.214 (P>.05)$  for the main effect of Factor D (Socio-economic Status) is very less than the critical value ( $F_{.05} = 3.09$ ), therefore F- ratio is not significant at .05 level. As indicated by the eta squared value (.043) that the main effect of SES accounts for only 4.3% of the variance in total. Therefore the null hypothesis that is the mean scores of adolescents' knowledge for living in harmony are not significantly different in high, middle and low SES groups is accepted and the observed difference between them may be due to sampling error.

**Table –V : Summary Table of Multiple Comparisons of Students' Post-test Knowledge Scores at Different Stages of Socio-Economic Status**

	(I) Socio-economic Status	(J) Socio-economic Status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	High	Low	11.56*	1.711	.000	7.49	15.63
		Middle	4.55*	1.385	.004	1.25	7.84
	Low	High	-11.56*	1.711	.000	-15.63	-7.49
		Middle	-7.01*	1.571	.000	-10.75	-3.27
	Middle	High	-4.55*	1.385	.004	-7.84	-1.25

		Low	7.01*	1.571	.000	3.27	10.75
Bonferroni	High	Low	11.56*	1.711	.000	7.39	15.72
		Middle	4.55*	1.385	.004	1.18	7.92
	Low	High	-11.56*	1.711	.000	-15.72	-7.39
		Middle	-7.01*	1.571	.000	-10.84	-3.19
Middle	High		-4.55*	1.385	.004	-7.92	-1.18
	Low		7.01*	1.571	.000	3.19	10.84

Based on observed means. The error term is Mean Square (Error) = 45.216.

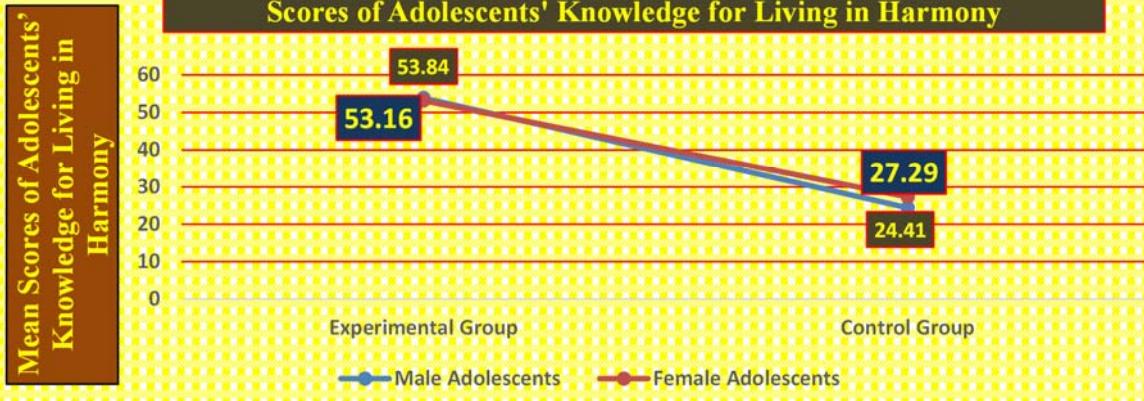
\*. The mean difference is significant at the .05 level.

The above **Table-III, & V** and **Figure- 4** shows that the mean score of adolescents' knowledge for living in harmony pertaining to high socio-economic status group (44.29) is significantly higher than that of middle SES group (39.74). The calculated value of **t = 3.2851 (P<.05)** for (df = 98) is very high than the critical value (**t.05 = 1.98**), therefore t- ratio is significant at **.05** level. Therefore the null hypothesis is rejected and research hypothesis that is the mean scores of adolescents' knowledge for living in harmony pertaining to high SES group is significantly different from that of middle SES group, is accepted.

The above **Table-III, & V** and **Figure- 4** shows that the mean score of adolescents' knowledge for living in harmony pertaining to middle SES group (39.74) is significantly higher than that of low SES group (32.73). The calculated value of **t = 4.4621 (P<.05)** for (df = 86) is much higher than the critical value (**t.05 = 1.98**), therefore t- ratio is significant at **.05** level. Therefore the null hypothesis is rejected and research hypothesis that is the mean scores of adolescents' knowledge for living in harmony pertaining to middle SES group is significantly different from that of low SES group, is accepted.

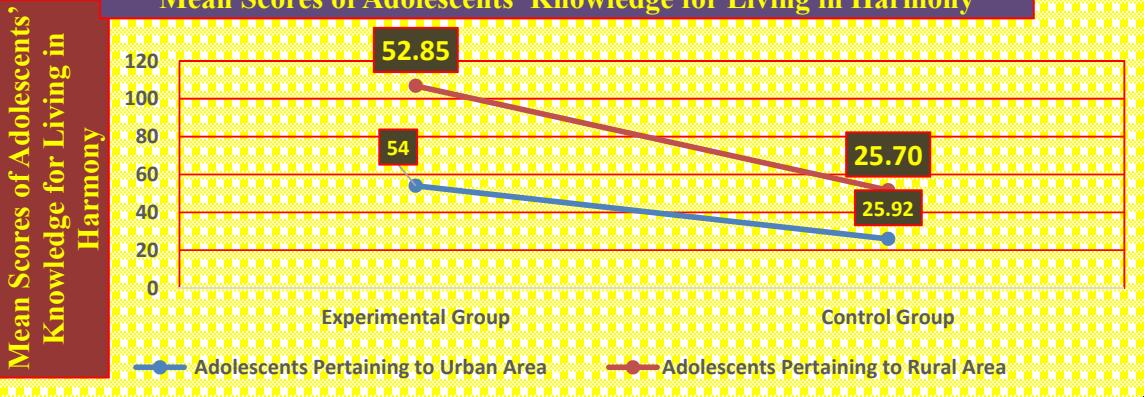
The above **Table-III, & V** and **Figure- 4** shows that the mean score of adolescents' knowledge for living in harmony pertaining to high SES group (44.29) is significantly higher than that of low SES group (32.73). The calculated value of **t = 6.7563 (P<.05)** for (df = 62) is much higher than the critical value (**t.05 = 1.98**), therefore t- ratio is significant at **.05** level. Therefore the null hypothesis is rejected and research hypothesis that is the mean scores of adolescents' knowledge for living in harmony pertaining to high SES group is significantly different from that of low SES group, is accepted.

**Figure 5. Showing the Interaction between Factor A (Implementation of Peace Module ), Factor B (Sex), at Different Stages of them on the Mean Scores of Adolescents' Knowledge for Living in Harmony**



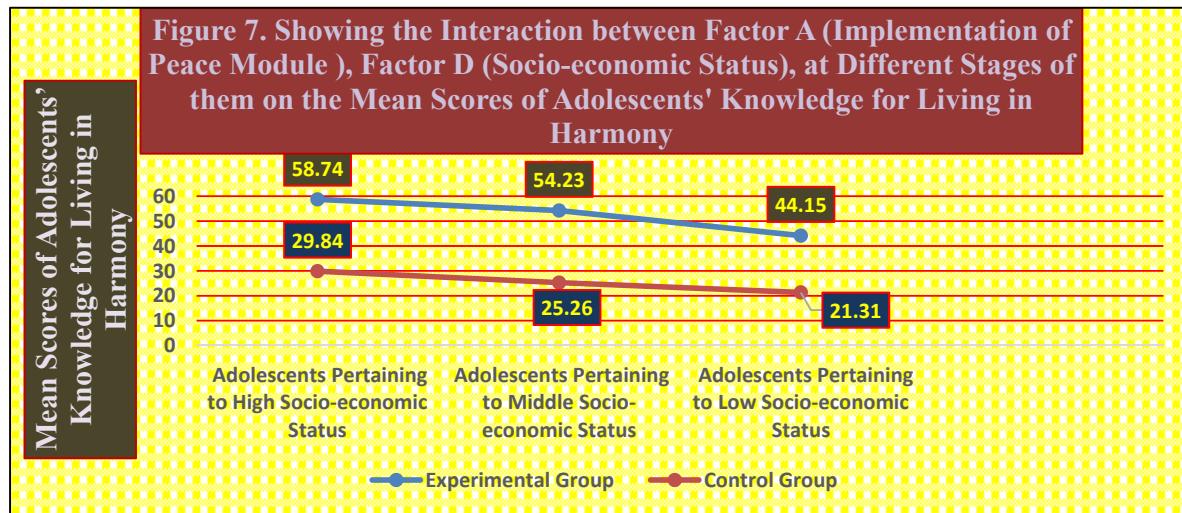
The above **Table-III & IV** and **Figure- 5** shows that the mean scores of adolescents' knowledge for living in harmony pertaining to different stages of Factor A (Implementation of Peace Module ), Factor B (Sex) are significantly interacting. The calculated value of  $F(1, 99) = 5.699 (P < .05)$  for the interaction effect of Factor A and Factor B (Implementation of Peace Module & Sex) far exceeds the critical value ( $F_{.05} = 3.94$ ), therefore F- ratio is significant at  $.05$  level. As indicated by the eta squared value (.054) that the interaction effect of Factor A and Factor B (Implementation of Peace Module & Sex) accounts for **5.4%** of the variance in total. Therefore null hypothesis is rejected and research hypothesis that is the implementation of peace module & sex differences interact significantly for the knowledge of adolescents for living in harmony, is accepted.

**Figure 6. Showing the Interaction between Factor A (Implementation of Peace Module ), Factor C (Area), at Different Stages of them on the Mean Scores of Adolescents' Knowledge for Living in Harmony**



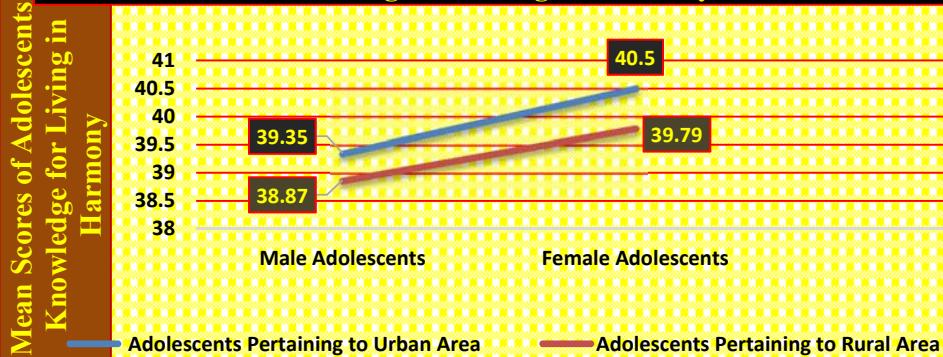
The above **Table-III & IV** and **Figure- 6** shows that the mean scores of adolescents' knowledge for living in harmony pertaining to different stages of Factor A (Implementation of Peace Module ), Factor C (Area) are not interacting. The calculated value of  $F(1, 99) = .419 (P > .05)$

for the interaction effect of Factor A and Factor C (Implementation of Peace Module & Area) is very less than the critical value ( $F_{.05} = 3.94$ ), therefore F- ratio is not significant at .05 level. As indicated by the eta squared value (.004) that the interaction effect of Factor A and Factor C (Implementation of Peace Module & Area) accounts for only **0.4%** of the variance in total. Therefore the null hypothesis that is the implementation of peace module & area differences don't interact significantly for the knowledge of adolescents for living in harmony, is accepted.



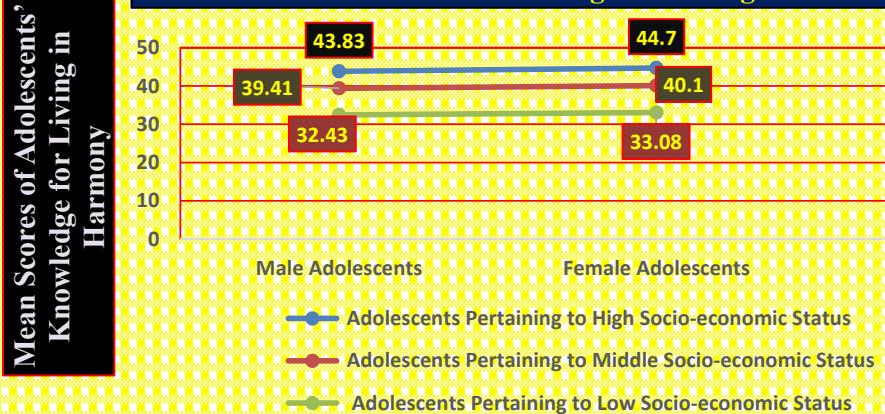
The above **Table-III & IV** and **Figure- 7** shows that the mean scores of adolescents' knowledge for living in harmony pertaining to different stages of Factor A (Implementation of Peace Module ), Factor D (Socio-economic Status) are interacting significantly. The calculated value of  $F(2, 99) = 3.225$  ( $P < .05$ ) for the interaction effect of Factor A and Factor D (Implementation of Peace Module & Socio-economic Status) far exceeds the critical value ( $F_{.05} = 3.09$ ), therefore F- ratio is significant at .05 level. As indicated by the eta squared value (.061) that the interaction effect of Factor A and Factor D (Implementation of Peace Module & Socio-economic Status) accounts for **6.1%** of the variance in total. Therefore null hypothesis is rejected and research hypothesis that is the implementation of peace module & socio-economic status differences interact significantly for the knowledge of adolescents for living in harmony, is accepted.

**Figure 8. Showing the Interaction between Factor B (Sex), Factor C (Area), at Different Stages of them on the Mean Scores of Adolescents' Knowledge for Living in Harmony**



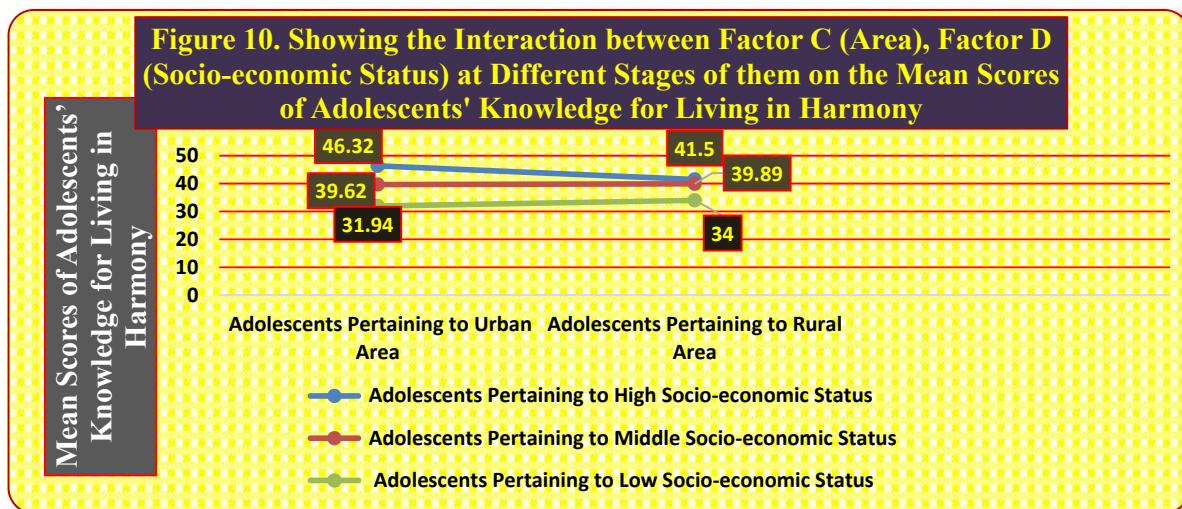
The above **Table-III & IV** and **Figure- 8** shows that the mean scores of adolescents' knowledge for living in harmony pertaining to different stages of Factor B (Sex ), Factor C (Area) are not interacting. The calculated value of  $F(1, 99) = 2.635 (P>.05)$  for the interaction effect of Factor B and Factor C (Sex & Area) is very less than the critical value ( $F_{.05} = 3.94$ ), therefore F-ratio is not significant at **.05 level**. As indicated by the eta squared value (.026) that the interaction effect of Factor B and Factor C (Sex & Area) accounts for only **2.6%** of the variance in total. Therefore the null hypothesis that is the sex & area differences don't interact significantly for the knowledge of adolescents for living in harmony, is accepted.

**Figure 9. Showing the Interaction between Factor B (Sex), Factor D (Socio-economic Status) at Different Stages of them on the Mean Scores of Adolescents' Knowledge for Living in Harmony**



The above **Table-III & IV** and **Figure- 9** shows that the mean scores of adolescents' knowledge for living in harmony pertaining to different stages of Factor B (Sex ), Factor D (Socio-economic Status) are not interacting. The calculated value of  $F(2, 99) = 1.450 (P>.05)$  for the interaction effect of Factor B and Factor D (Sex & Socio-economic Status) is very less than the critical value ( $F_{.05} = 3.09$ ), therefore F- ratio is not significant at **.05 level**. As indicated by the eta

squared value (**.028**) that the interaction effect of Factor B and Factor D (Sex & Socio-economic Status) accounts for only **2.8%** of the variance in total. Therefore the null hypothesis that is the sex & socio-economic status differences don't interact significantly for the knowledge of adolescents for living in harmony, is accepted.



The above **Table-III & IV** and **Figure- 10** shows that the mean scores of adolescents' knowledge for living in harmony pertaining to different stages of Factor C (Area ), Factor D (Socio-economic Status) are not interacting. The calculated value of  $F(2, 99) = 0.201 (P>.05)$  for the interaction effect of Factor C and Factor D (Area & Socio-economic Status) is very less than the critical value ( $F_{.05} = 3.09$ ), therefore F- ratio is not significant at **.05** level. As indicated by the eta squared value (**.004**) that the interaction effect of Factor C and Factor D (Area & Socio-economic Status) accounts for only **0.40%** of the variance in total. Therefore the null hypothesis that is the area & socio-economic status differences don't interact significantly for the knowledge of adolescents for living in harmony, is accepted.

The calculated value of  $F(1, 99) = 3.317 (P>.05)$  for the interaction effect of Factor A, Factor B and Factor C (Implementation of Peace Module, Sex and Area) is less than the critical value ( $F_{.05} = 3.94$ ), therefore F- ratio is not significant at **.05** level. As indicated by the eta squared value (**.032**) that the interaction effect of Factor A, Factor B and Factor C (Implementation of Peace Module, Sex and Area) accounts for only **3.2%** of the variance in total. Therefore the null hypothesis that is the implementation of peace module, sex and area differences don't interact significantly for the knowledge of adolescents for living in harmony, is accepted.

The calculated value of  $F(2, 99) = 2.179 (P>.05)$  for the interaction effect of Factor A, Factor B and Factor D (Implementation of Peace Module, Sex and Socio-economic Status) is very less than the critical value ( $F_{.05} = 3.09$ ), therefore F- ratio is not significant at **.05** level. As indicated

by the eta squared value (.042) that the interaction effect of Factor A, Factor B and Factor D (Implementation of Peace Module, Sex and Socio-economic Status) accounts for only **4.2%** of the variance in total. Therefore the null hypothesis that is the implementation of peace module, sex and socio-economic status differences don't interact significantly for the knowledge of adolescents for living in harmony, is accepted.

The calculated value of **F (2, 99) = .559 (P>.05)** for the interaction effect of Factor A, Factor C and Factor D (Implementation of Peace Module, Area and Socio-economic Status) is very less than the critical value (**F.05 = 3.09**), therefore F- ratio is not significant at **.05** level. As indicated by the eta squared value (.011) that the interaction effect of Factor A, Factor C and Factor D (Implementation of Peace Module, Area and Socio-economic Status) accounts for only **1.1%** of the variance in total. Therefore the null hypothesis that is the implementation of peace module, area and socio-economic status differences don't interact significantly for the knowledge of adolescents for living in harmony, is accepted.

The calculated value of **F (2, 99) = 2.386 (P>.05)** for the interaction effect of Factor B, Factor C and Factor D (Sex, Area and Socio-economic Status) is less than the critical value (**F.05 = 3.09**), therefore F- ratio is not significant at **.05** level. As indicated by the eta squared value (.046) that the interaction effect of Factor B, Factor C and Factor D (Sex, Area and Socio-economic Status) accounts for only **4.6%** of the variance in total. Therefore the null hypothesis that is the sex, area and socio-economic status differences don't interact significantly for the knowledge of adolescents for living in harmony, is accepted.

The calculated value of **F (2, 99) = .352 (P>.05)** for the interaction effect of Factor A, Factor B, Factor C and Factor D (Implementation of Peace Module, Sex, Area and Socio-economic Status) is very less than the critical value (**F.05 = 3.09**), therefore F- ratio is not significant at **.05** level. As indicated by the eta squared value (.007) that the interaction effect of Factor A, Factor B, Factor C and Factor D (Implementation of Peace Module, Sex, Area and Socio-economic Status) accounts for only **0.70%** of the variance in total. Therefore the null hypothesis that is the implementation of peace module, sex, area and socio-economic status differences don't interact significantly for the knowledge of adolescents for living in harmony, is accepted.

**Findings and its Interpretation :** After analyzing the above data, the findings are as follows:

- ❖ The mean score of adolescents' knowledge for living in harmony is significantly higher in experimental group than that of control group which shows that implementation of peace module influences significantly to the knowledge of adolescents for living in harmony. The possible reasons may be that implementation of peace module creates the environment conducive to nurture the appropriate knowledge, attitude and values for living in harmony

among the students through organizing proper curricular and co-curricular activities in the class room. As some of the researches in the field like – **Muhammad Daniyal, Tahir Nawaz, Ali Hassan and Iqra Mubeen (2012)** found that the co-curricular activities affect academic achievements of the students : benefit of co-curricular activities matter over the knowledge, skills, attitude and academic performance (**Aileen, 2016**). The same thing **Banta & Kuh (1998)** revealed that the students who actively participated in curricular and co-curricular activities, became more receptive to ideas and more accepting of people from different backgrounds. They approached studies more seriously in subsequent years than they had in their first year : co-curricular activities were positively correlated to academic performance (**Hanks & Eckland, 1976; Camp, 1990**).

- ❖ The mean score of adolescents' knowledge for living in harmony pertaining to male group is comparatively less than that of their female counterparts which shows that implementation of peace module influences more positively to the knowledge of female adolescents for living in harmony in comparison to that of male adolescents. The possible reasons may be that the girls are more humane and sensitive by nature in comparison to boys. They were comparatively more sincere in taking part in all the curricular and co-curricular activities that were organized in the class room. They had participated whole heartedly in them and fully enjoyed them. As some of the researches in the field like – **Lenka (2005)** found that the male and female postgraduate students were significantly different in their environmental awareness. **Abraham and Arjunan (2005)** found significant difference between boys and girls in degree of relationship between the environmental attitude and pro-environmental behavior.
- ❖ It is found that there is no significant difference between the mean scores of adolescents' knowledge for living in harmony pertaining to urban and rural groups which shows that implementation of peace module equally influences to both the groups and area differences hasn't any significant impact on adolescents' knowledge for living in harmony. The possible reasons may be that the adolescent belonging to both the localities – urban and rural are facing almost similar problems in their day to day life situations like- home violence, social violence, structural violence, social injustices, corruption, ill social practices, prejudices and partialities that are detrimental to their physical, mental, emotional and spiritual health. As some of the researches in the field like- **Abraham and Arjunan (2005)** found that rural and urban subjects do not differ significantly with regard to the relationship between environmental attitude and pro-environmental behavior.
- ❖ It is found that the mean scores of adolescents' knowledge for living in harmony pertaining to high socio-economic status group (44.29) is significantly higher than that of both middle and low SES groups while the mean scores of low SES group (32.73) is

significantly less than that of both high and middle SES groups which shows that socio-economic status differences has significant impact on adolescents' knowledge for living in harmony. The possible reasons may be that the family climate of the adolescent belonging to different socio-economic status groups, is considerably different from each other. They are experiencing a considerable social distance among one another and facing social prejudices, discriminations and injustices, ill social practices and traditions that adversely affect their physical, mental, emotional and spiritual health. Some of the studies in the area like- *Kaushik (2002)* found that socio-economic status played a significant role to determine Environmental Awareness and Attitude towards Environmental Education. Further, he reported that the General caste students were significantly better in their Environmental Awareness and Attitude towards Environmental Education than that of OBC and SC students. OBC B.Ed. students were also found significantly superior to SC candidate, when compared on both the traits under investigation.

- ❖ It is found that is the implementation of peace module & sex differences are interacting significantly with each other for the knowledge of adolescents for living in harmony.
- ❖ It is found that is the implementation of peace module & area differences are not interacting significantly with each other for the knowledge of adolescents for living in harmony.
- ❖ It is found that the implementation of peace module & socio-economic status differences are interacting significantly with each other for the knowledge of adolescents for living in harmony.
- ❖ It is found that sex & area differences are not interacting significantly with each other for the knowledge of adolescents for living in harmony.
- ❖ It is found that the sex & socio-economic status differences are not interacting significantly with each other for the knowledge of adolescents for living in harmony.
- ❖ It is found that the area & socio-economic status differences are not interacting significantly with each other for the knowledge of adolescents for living in harmony.
- ❖ It is found that the implementation of peace module, sex and area differences are not interacting significantly with each other for the knowledge of adolescents for living in harmony.

- ❖ It is found that the implementation of peace module, sex and socio-economic status differences are not interacting significantly with each other for the knowledge of adolescents for living in harmony.
- ❖ It is found that the implementation of peace module, area and socio-economic status differences are not interacting significantly with each other for the knowledge of adolescents for living in harmony.
- ❖ It is found that sex, area and socio-economic status differences are not interacting significantly with each other for the knowledge of adolescents for living in harmony.
- ❖ It is found that implementation of peace module, sex, area and socio-economic status differences are not interacting significantly with each other for the knowledge of adolescents for living in harmony.

### **Conclusion:**

Increasing level of violence in our society with alarming rate has caught the attention of the world at large. Theft, plundering, murder, terrorism, kidnapping, eve teasing, sexual assaults, home violence, corruption and social violence are the everyday phenomena of our day to day life that destroyed the physical, mental and spiritual health of the whole humanity particularly the early adolescents are more adversely affected with this serious problem. Many researches has been conducted to transform violent human nature and attitude into humane and peaceful via organizing wholesome education to control over the unexpected level of violence. Implementation of peace module influenced significantly to the knowledge of adolescents for living in harmony. It can play a pivot role in future in making the world more peaceful, humane and worth living.

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***Impact of Peace Module on Adolescent's Knowledge for Living in Harmony***

**Dheeraj Kumar Pandey<sup>1</sup>**

**Prof. R. P. Shukla<sup>2</sup>**