

## **5. Effect of Team Teaching, Integrated Technology and Traditional Method on Social Dimension of Self-Concept of 13-16 years old students.**

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### **Abstract**

*This experimental research work was conducted to compare the effect of teaching by using integrated technology, team teaching and traditional teaching methods on the basis of Social Self-Concept of 13 to 16 year old students. To see the difference the study was conducted on 219 students belonging to urban and rural areas of Jabalpur District. The students were divided into experimental and control groups. To understand how the treatment affected them, participants took a test measuring their sense of self before undergoing a 30-day program. This was followed by a post test on all the three groups. Gain scores were obtained. Statistical analysis was conducted by using 2x2x3 analysis of variance. Findings revealed that team teaching was found to be the best method to develop Social Dimension of Self Concept of 13 to 16 year old students when compared with integrated technology and Team Teaching.*

### **Introduction:**

We are in the 21<sup>st</sup> century and our country has completed its 76 years of independence. We are still a developing country and striving hard to be in the list of developed countries and for this we have given ourselves a deadline of 2047. By the time our country celebrates its 100<sup>th</sup> Independence Day we have to be developed nation. To achieve this status, we need to be economically strong. Economic independence and strength will come only when each and every individual of our country will be economically independent and strong. India is undergoing various reforms may it be economical, social or educational. Education is the key component of all the developmental activities and plays a pivotal role in bringing the social change. NEP 2020 is being observed as road map to achieve the desired change in the society. As we are very much aware of the fact that society is a group of people and to bring social change it is important to bring the changes in every individual of the society.

To bring about the desired change in the society it is very important to focus each and every individual. NEP 2020 clearly mentions that the aim of education system should be to develop good confident, courageous, compassionate individuals with creative thinking and problem-solving abilities. It emphasizes on the development of such life skills which enable them to be an active and confident member of society such as communication, cooperation team work etc. It advocates the use of such teaching methods which are different from conventional methods. As J. Krishnamurti has said that the chief aim of education should be to develop right relationship among society members and for this they should first understand their own self-

concept. Adults with high Self Concept are significantly better adjusted than adults with low Self Concept (Deshmukh and Sawalakhe, 2010). The behaviour of an individual is observed to be dominated by his thinking about himself. All the aspects of self-concept are equally important and need to be taken care right from the time the students are toddlers as it is mentioned by Gallup & Suarez (1986) that a child knows himself when he is 15-18 months old and by the age of 8-10 years starts comparing themselves to others.

Every individual's self is a homogenous mix of various dimensions of self-e.g. physical, social, temperamental, academic, intellectual and moral self. All these aspects of one's self form the self-concept of a person and accordingly directs one's behaviour. Education is a potent tool which has the power to change an individual's way of looking up to themselves. Therefore, such teaching methods should be used which help every individual to elevate himself in his own sight. Team Teaching which was found to show a positive effect on students' as well as teacher's personality (Fea, 1968). Gamsky (1970), found team taught students to display a positive effect on their personality. Guided by the such studies present study was conducted. To see the effectiveness of team teaching it was compared with two other methods namely Integrated technology and Traditional Method.

**Statement of Problem:**

Effect of Team Teaching, Integrated Technology and Traditional Method on Social Dimension of Self-Concept of 13-16 years old students.

**Objective of the study**

To Study the impact of three teaching methods on the social self-concept of students aged 13 to 16. This study will examine how gender and location (urban or rural) influence the effectiveness of Integrated Technology, Team-Teaching, and Traditional Methods in shaping students' social self-perception.

**Hypothesis:** There is no significant difference in how boys and girls (ages 13-16) from urban or rural areas viewed themselves socially, regardless of whether they were taught using technology, teamwork among teachers, or traditional methods.

**Delimitations:** The present study was delimited by using Team Teaching group as experimental group and integrated technology and traditional method groups as controlled group.

**Methodology:** Experimental Research Method, Non-equivalent Control group, 2 x 2 x 3 analysis of variance.

**Sample:** A purposeful sample of 219 {101 Urban (63 male 38 female) students 118 Rural (46 male 72 female)} the research included students from 13 to 16 years old.

**Tools of study:**

**Independent variables:** were Lesson Plans based on Integrated Technology, Team Teaching and Traditional Method and dependent variable was Social Self Concept which was measured by Self-Concept Questionnaire by Dr. Raj Kumar Saraswat.

**Procedure:** The sample was divided into three (A. Inegrated Technology, B. Team Teaching and C. Traditional Teaching) groups. For data collection of present work Scale of Self-Concept was administered as a pretest and after conducting the treatment of 30 days a post test on both the groups. Gain scores were obtained after scoring (Post test-Pretest).

**Table No. 1.**

**Summary of 2X2X3 Factorial Designs ANOVA of Social Dimension of Self Concept of 13-16 year old students.**

Source of Variance	Df	Sum of Squares(SS)	Mean Square (MSS)	F
Gender	1	55.42	55.42	8.43**
Area	1	167.92	167.92	25.54**
Methods	2	286.22	143.11	21.76**
Gender * Area	1	3.06	3.06	.47
Gender * Methods	2	2.23	1.11	.17
Area * Methods	2	59.52	29.76	4.53**
Gender* Area* Methods	2	1.47	.73	.11
<b>Total</b>	<b>219</b>	<b>4292.00</b>		

\*\* Significant at 0.01 Level of significance

**Table No. 2**

**Gender, Area and Method wise Number, Mean, S.D. Value of Social Dimension of Self Concept of 13-16 year old students.**

Gender	Area	Method	N	Mean	Std. Deviation
Male	Urban	Integrated Technology	14	2.43	1.79
		Team Teaching	21	3.76	2.59
		Traditional Method	28	1.79	1.17
		Total	63	2.59	2.04
	Rural	Integrated Technology	13	3.54	2.37
		Team Teaching	16	7.25	3.59

		Traditional Method	17	3.53	2.74
		Total	46	4.83	3.41
	Total	Integrated Technology	27	2.96	2.12
		Team Teaching	37	5.27	3.49
		Traditional Method	45	2.44	2.07
		Total	109	3.53	2.91
Female	Urban	Integrated Technology	13	1.62	.87
		Team Teaching	17	2.53	1.84
		Traditional Method	8	1.38	.74
		Total	38	1.97	1.44
	Rural	Integrated Technology	29	2.48	1.72
		Team Teaching	25	5.76	4.72
		Traditional Method	18	2.11	2.19
		Total	72	3.53	3.55
	Total	Integrated Technology	42	2.21	1.55
		Team Teaching	42	4.45	4.12
		Traditional Method	26	1.88	1.88
		Total	110	2.99	3.08
Total	Urban	Integrated Technology	27	2.04	1.45
		Team Teaching	38	3.21	2.34
		Traditional Method	36	1.69	1.09
		Total	101	2.36	1.86
	Rural	Integrated Technology	42	2.81	1.98
		Team Teaching	41	6.34	4.33
		Traditional Method	35	2.80	2.54
		Total	118	4.03	3.54
	Total	Integrated Technology	69	2.51	1.82
		Team Teaching	79	4.84	3.83
		Traditional Method	71	2.24	2.01
		Total	219	3.26	3.00

**Table No. 3**

**Mean and Significant difference for all three Methods.**

S. No.	Method	N	$\bar{X}$	I.T.	Team Teaching
1.	Traditional Method	71	2.24	N.S.	**
2.	Integrated Technology (I.T.)	69	2.51	___	**
3.	Team Teaching	79	4.84	___	___

\*\* Significant at 0.01 Level of significance, N.S.-Not significant

### Effect of Gender on Social Dimension of Self Concept of 13 to 16 year old students

From the Table No.1 It can be seen that the F-value for Gender was 8.428 which was significant at 0.01 level of significance with  $df=1/218$ . It indicates that the mean score of Social Dimension of Self Concept of 13 to 16 year old Male and Female students differ significantly. Thus the **Null Hypothesis** that “There is no significant difference between mean score of Social Dimension of Self Concept 13 to 16 year old Male and Female students” is **rejected**. Further the mean score of Social Dimension of Self Concept of 13 to 16 year old Male students was 3.53 which was significantly higher than 13 to 16 year old Female students whose mean score was 2.99 (difference = .54) [Vide Table No.2 and Graph No.1]. It may therefore be said that, Social Dimension of Self Concept of 13 to 16 year old Male students was found to be significantly superior than Social Dimension of Self Concept of 13 to 16 year old Female students.

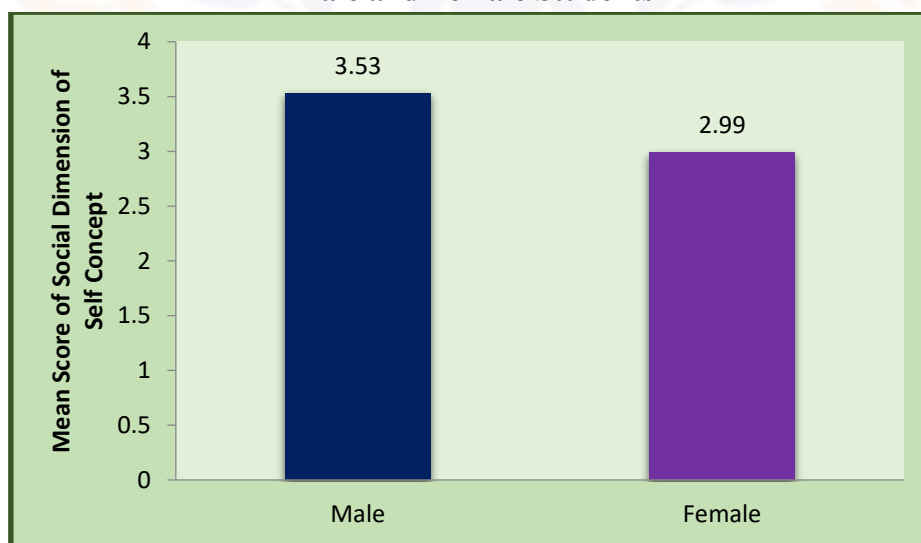
### Effect of Area on Social Dimension of Self Concept of 13 to 16 year old students.

From Table No.1 It is observed that F- ratio for Area was 25.54 which was significant at 0.01 level of significance with degree of freedom 1/218. It interprets that the mean score of Social Dimension of 13to16 year old students who belonged to Urban and Rural Area of Jabalpur District differ significantly. Thus the **Null Hypothesis** That “There is no significant difference between the mean score of Social Dimension of Self Concept of 13 to16 year old students of Urban and Rural Area” is **rejected**.

Further the mean score of Social Dimension of Self Concept of 13to16 year old Rural

**Graph No. 1**

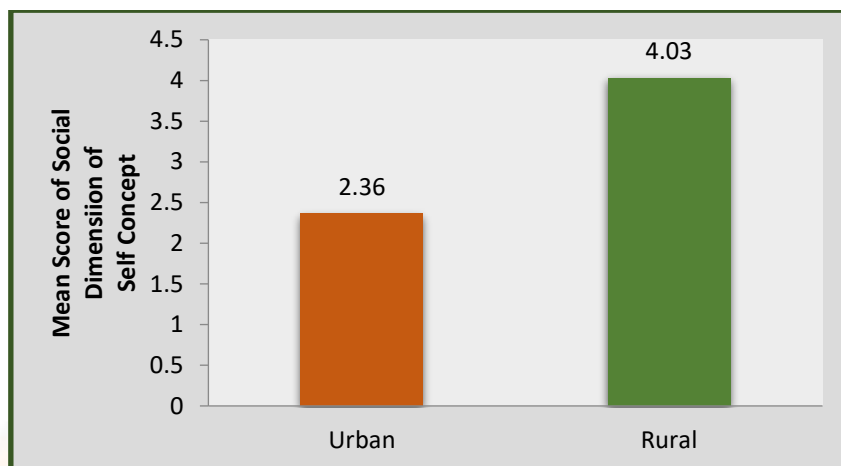
**Mean Score of Social Dimension of Self Concept of 13 to 16 Year old Male and Female Students**





Graph No. 2

Mean Score of Social Dimension of Self Concept of 13 to 16 Year old Urban and Rural Area Students



Area students was 4.03, which was significantly higher than 13 to 16 year old Urban Area students whose mean score was 2.35 (difference =1.68)[Vide Table No.2 and Graph No. 2]. It may therefore be said that the Social Dimension of Self Concept of 13 to 16 year old Rural Area students was found to be significantly better than Social Dimension of Self Concept 13 to 16 year old Urban Area students.

### Effect of Method on Social Dimension of Self Concept of 13 to 16 year old students.

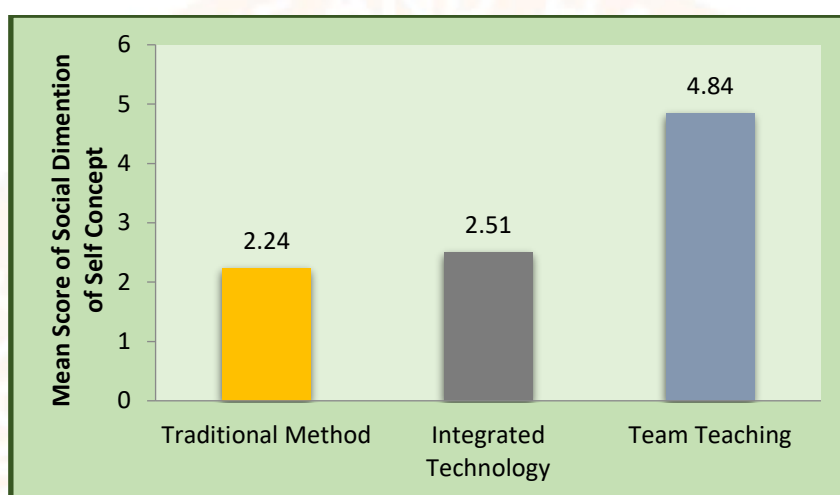
From Table No. 1 It is observed that F- ratio for Method was 21.76 which was significant at 0.01 level of significance with degree of freedom 2/217. It reflects that the mean score of Social Dimension of Self Concept of 13 to 16 year old students who were taught by Integrated Technology, Team Teaching and Traditional Method differed significantly. Thus the **Null Hypothesis** That “There is no significant difference between mean score of Social Dimension of Self Concept of 13 to 16 year old students when taught by Integrated Technology, Team Teaching and Traditional Method” is **rejected**. Further the mean score of Social Dimension of Self Concept of 13 to 16 year old students when they were taught by Integrated Technology was 2.51, when taught by Team Teaching was 4.84 and when taught by Traditional Method was 2.24[Vide Table No.2 and Graph No.3].

**Duncan Multiple Range Test** was used to test the difference among the mean score of all three Methods. A significant difference using 0.01 level of significance was found between Traditional Method (mean =2.24) and Team Teaching (mean =4.84) similarly a significant difference using 0.01 level of significance was found between Integrated Technology (mean=2.51) and Team Teaching (mean =4.84). No significant difference using was found between mean scores of Social Dimension of Self Concept of 13 to 16 year old students of Integrated Technology group(mean =2.51) and Traditional Method group(mean=2.24) [Vide Table no. 3]. It may therefore be said that Social Dimension of Self Concept of 13 to 16 year

old students who were taught by Team Teaching was found to be at par than 13 to 16 year old students who were taught by Integrated Technology and Traditional Method. Social Dimension of Self Concept of 13 to 16 year old students who were taught by Integrated Technology was found to be almost equal to

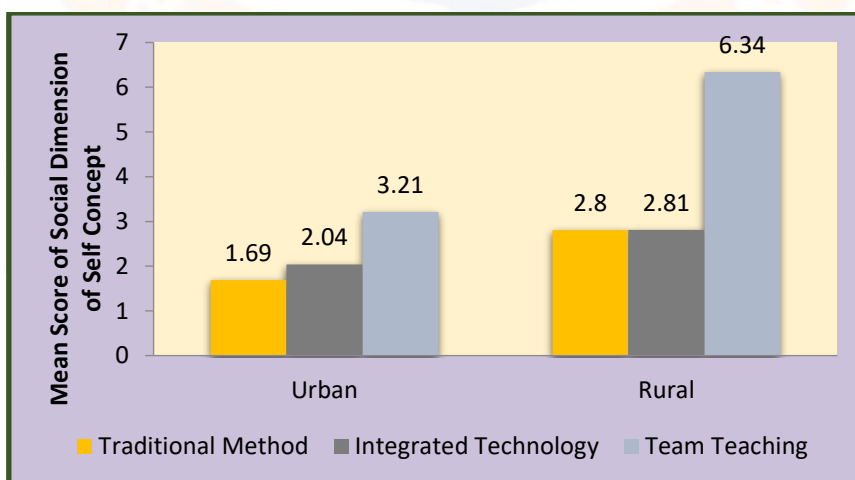
**Graph No. 3**

**Mean Score of Social Dimension of Self Concept of 13 to 16 Year old Students taught by Traditional Method, Integrated Technology and Team Teaching Method**



**Graph No. 4**

**Mean Score of Social Dimension of Self Concept of 13 to 16 Year old Rural and Urban Area Students taught by Traditional Method, Integrated Technology and Team Teaching Method**



Social Dimension of Self Concept 13 to 16 year old students who were taught by Traditional Method.

#### **Effect of Gender and Area on Social Dimension of Self Concept of 13 to 16 year old students**

From Table No. 1 it is evident that F- value for joint effect of Gender and Area was .47 which was not significant at 0.05 level of significance with  $df = 1/218$ . It means that the mean score of Social Dimension of Self Concept of 13 to 16 year old Male and Female students who belong to Urban and Rural Area of Jabalpur District did not differ significantly. Thus the **Null Hypothesis** that "There is no Area and Gender wise significant joint difference among mean score of Social Dimension of Self Concept of 13 to 16 year old students" **is not rejected**

#### **Effect of Gender and Method on Social Dimension of Self Concept of 13 to 16 year old students**

From Table No.1 it is evident that F- value for joint effect of Gender and Method was .17 which was not significant at 0.05 level of significance with  $df = 2/217$ . It means that the mean score of Social Dimension of Self Concept of 13 to 16 year old Male and Female students of all the three groups who were taught by three different Methods i.e. Integrated Technology, Team Teaching and Traditional Method did not differ significantly. Thus the **Null Hypothesis** that "There is no Gender and Method wise significant joint difference among mean score of Social Dimension of Self Concept of 13 to 16 year old students" **is not rejected**.

#### **Effect of Area and Method on Social Dimension of Self Concept of 13 to 16 year old students.**

It is clearly evident From Table No.1 that F- ratio for joint effect of Area and Method was 4.53 which was significant at 0.01 level of significance with degree of freedom 2/217. It interprets that the mean score of Social Dimension of Self Concept of 13 to 16 year old Urban and Rural Area students who were taught by Integrated Technology, Team Teaching and Traditional Method differed significantly. Thus the **Null Hypothesis** that "There is no Area and Method wise significant difference among mean score of Social Dimension of Self Concept of 13 to 16 year old students when taught by Integrated Technology, Team Teaching and Traditional Method" **is rejected**. Further the mean score of Social Dimension of Self Concept of 13 to 16 year old Urban Area students when they were taught by Integrated Technology was 2.04, when taught by Team Teaching was 3.21 and when taught by Traditional Method was 1.69. Similarly, the mean score of 13 to 16 year old Rural students who were taught by Integrated Technology, Team Teaching and Traditional Method were 2.81, 6.34 and 2.80 respectively. [Vide Table No.1 and Graph No.4]. Therefore, it may be said that for Social Dimension of Self Concept of 13 to 16 year old Rural and Urban Area students who were taught by Team Teaching showed better performance in comparison to the 13 to 16 year old students of Rural and Urban Area who were taught by Integrated Technology and Traditional Method. Overall, Team Teaching group of Rural Area students showed the best performance and Traditional Method & Integrated Technology showed almost equal effect on Social Dimension of Self Concept of 13 to 16 year old students.



### **Effect of Gender, Area, and Method on Social Dimension of Self Concept of 13 to 16 year old students**

From Table no.1 it is clearly stated that F – value for interactional effect of Gender, Area and Method was .11 which was not significant at 0.05 level of significance with  $d/f = 2/217$ . It means that there was no significant difference among the mean score of 13 to 16 year old Male and Female students who belonged to Urban and Rural Areas of Jabalpur District and were taught by Integrated Technology, Team Teaching and Traditional Method. Thus the **Null Hypothesis** “There is no Gender, Area and Method wise significant interactional difference among mean score of Social Dimension of Self Concept of 13 to 16 year old students” is not rejected.

### **Interpretation and Discussion**

#### **[Table no. 1 to 3 and Graph no.1 to 4]**

Significant difference was found for Gender. Results indicate that Social Dimension of Self Concept of 13 to 16 year old Male students was found to be higher than 13 to 16 year old Female students. Clearly evident from Table no. 2 and Graph no.1 that the mean score of Social Dimension of 13 to 16 year old Male students is 3.53 which is higher than Females students which was found to be 2.99. This may be because in Indian societies Males are given more freedom to move in the society all the time without any restriction on the other hand Females are restricted to the house hold work and are not allowed to move out of the house unless and until it is very important. They are always permitted with a lot of instructing and do's and don'ts which decreases their Social Self Concept.

Significant difference was observed for Area, result revealed that Social Dimension of 13 to 16 year old Rural Area students is better than Urban Area students. As seen in the Graph no. 2 and Table no. 2 that the mean score of Social Dimension of 13 to 16 year old students of Rural Area was found to be 4.03 and Urban Area was found to be 2.36. This may be because in Urban Areas most of the children are living in nuclear families, people are confined to their workplace and homes only, they rarely move out to visit someone's place. They are more on virtual social network, whereas in Rural Area most of the children live in joint families. They regularly visit their relatives. They still believe in actual social networking and social values. That is why Rural students have significantly better Social Self Concept than Urban students.

Significant difference was found for Method. As observed in result that 13 to 16 year old students who were taught by Team Teaching showed the best result for Social Dimension of Self Concept. Among the three Methods i.e. Traditional Method, Team Teaching and Integrated Technology; Team Teaching was found to be the most effective Method. Integrated Technology was found to be almost equally effective as Traditional Method. It can be clearly seen in the Table no 2 and Graph no. 3 that the mean scores of 13 to 16 year old students for Social Dimension of Self Concept were found to be 4.84 when taught by Team Teaching, 2.51 when taught by Integrated Technology and 2.24 when taught by Traditional Method. [Vide

Table no. 2] To test significant difference in the mean score of Social Dimension of Self Concept of 13 to 16 year old students Duncan Multiple Range test was used. Result revealed that the mean score of Team Teaching was significantly higher than mean score of Integrated Technology and Traditional Method. [Vide Table no. 3] Team Teaching situation may be considered as a model of social construct, the investigator felt that a good social environment was developed through discussion, question answer and various other group activities which were helpful for students and also for teachers. Students learned to accept and value each other's opinions and existence, sharing of views, rationality, logic, patience and listening. Students were very happy in the classroom. In Integrated Technology class room this kind of flexibility and freedom was lacking. That is why Team Teaching was found to help more in the development of Social Dimension of Self Concept.

No significant difference was found for joint effect of Gender and Area. Result indicate that Social Dimension of Self Concept of 13 to 16 year old Male and Female students who belonged to Urban and Rural Area of Jabalpur is almost equal. [Vide Table no. 1]

No significant difference was found for joint effect of Gender and Method. Result states that Social Dimension of Self Concept of 13 to 16 year old Male and Female students of all the three groups who were taught by three different Methods i.e. Integrated Technology, Team Teaching and Traditional Method is almost equal. [Vide Table no. 1]

Significant difference was found for joint effect of Area and Method. Result reflects that the Social Dimension of Self Concept of 13 to 16 year old Urban and Rural Area students who were taught by Team Teaching was found to be better in comparison to 13 to 16 year old students of Urban and Rural Area who were taught by Integrated Technology and Traditional Method. From Graph No. 4 and Table no. 1 it can be seen that mean score for Rural Area is 6.34 when taught by Team Teaching, 2.81 when taught by Integrated Technology and 2.80 when taught by Traditional Method, and for Urban Area the mean score of Social Dimension of Self Concept was found to be 3.21 for Team Teaching class, 2.04 for Integrated Technology class and 1.69 for Traditional Method Class. In both the Areas Team Teaching class performed better but Rural Area students were found to be the best among all the groups. This is because in Rural Areas people are actually connected to each other and live with social values. These values were nurtured in the Team-Teaching class more effectively than in the other two classes. A Social learning environment was developed in Team-Teaching Class.

No significant difference was found for interactional effect of Gender; Area and Method for Social Dimension of Self Concept, Results tell that the Social Dimension of Self Concept of 13 to 16 year old Male and Female students belonging to Urban and Rural Area who were taught by three different Methods i.e. Team Teaching, Integrated Technology and Traditional Method was found to be almost equal. [Vide Table no. 1]

**Conclusions:**

1. Significant difference was found for Gender. Results indicate that Social Dimension of Self Concept of 13 to16 year old Male students was found to be higher than 13 to16 year old Female students.
2. Significant difference was observed for Area, result revealed that Social Dimension of 13 to 16 year old Rural Area students is better than Urban Area students.
3. Significant difference was found for Method. As observed in result that 13 to16 year old students who were taught by Team Teaching showed the best result for Social Dimension of Self Concept. Among the three Methods i.e. Traditional Method, Team Teaching and Integrated Technology; Team Teaching was found to be the most effective Method.

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