

EFFECTIVENESS OF STUDENT TEAM ACHIEVEMENT DIVISION (STAD) ON SOCIAL COMPETENCE OF SECONDARY SCHOOL STUDENTS

Pargat Singh Garcha¹ Rajni Bala²

Abstract

The purpose of present paper was to study the effectiveness of STAD (cooperative learning strategy) on social competence of secondary school students. The sample consists of 80 students (two intact sections) of class IX studying in a school affiliated to Punjab School Education Board, Mohali. Experimental group was taught social science content by using STAD strategy of cooperative learning and control group was taught by traditional method (lecture) by the investigator. Data was collected by using Social Competence Scale (2010) developed by Rani and Sharma. Data was analyzed by employing 2x2 factorial design of ANCOVA and results showed that students taught through STAD (cooperative learning strategy) (Mean=136.10, N=40) achieved significantly higher on social competence scale as compared to traditional method of teaching (Mean=123.32, N=40). Social Competence of students was found to be independent of interaction between treatment and gender.

Key Words: Social Competence, Student Team Achievement Division (STAD), Cooperative Learning

Social competence is an important ingredient of modern civilization; and an essential attribute of the members of a progressive society. It refers to a person's ability to get along with other people. A person's views of self in relation to the family, peers, and the wider world also affect his social competence. Social competence includes social, emotional, and cognitive skills and behaviors that children need for successful social adaptation. Social competence refers to the personal adequacy, interpersonal adequacy and communication skills (Rani and Sharma, 2010). Social competence is the effectiveness of adequacy with which an individual is capable of responding to various problematic situations which confront him (Goldfried and D'Zurill, 1969). To develop social competence among Indian school students we need to make our classroom best place to interact with each other, communicate their ideas effectively to other classmates and construct knowledge through cooperative efforts instead of making students passive listeners. For this purpose we have to shift from a teacher dominated classroom to student centred. This shift forces us to think out of the box to find some student centered modes (suitable for Indian conditions) as compared to the teacher centered authoritative modes of transacting the curriculum. Cooperative Learning, Constructivist and Active Learning approaches can be considered as examples of such student-centered learning strategies. Common to these approaches is the construction of knowledge by the learners rather than knowledge being transferred from teacher to student.

Cooperative learning is one of the main active group learning pedagogies. Co-operative learning means "Cooperation, a form of collaboration, is working together to accomplish shared goals" (Johnson & Johnson, 1989). Cooperative learning has also been described as one of the most widely investigated educational approaches (Slavin, 1996). Hundreds of studies have cited its benefits, and Johnson and Johnson (1989, 2000) and Slavin (1991) have produced extensive reviews of these. Numerous studies reported magnificent convergent outcomes across a wide range of areas for Cooperative learning studies done by several scholars and proponents of Cooperative learning since the 1900s, particularly studies done since 1970s have indicated not just a number of greater benefits of Cooperative learning to students, but also how Cooperative learning has become popular in different parts of the world. Slavin (1995) summarized the most extensively researched and widely used cooperative learning techniques as Learning Together and Alone, Teams-Games-Tournaments (TGT), Group Investigation, Constructive Controversy, Jigsaw Procedure, Student Teams Achievement Divisions (STAD), Complex Instruction, Team Accelerated Instruction (TAI), Cooperative Learning Structures and Cooperative Integrated Reading and Composition (CIRC). Student Teams Achievement Divisions (STAD) was selected in this study. Review of related literature revealed that a large number of studies have been conducted on Cooperative learning strategies in relation to a variety of cognitive, social and affective variables. Review of literature

¹ Asst. Prof., GHG Khalsa College of Education, Gurusar Sadhar, Ludhiana.

² Social Science Mistress, BCM Sr. Sec. School, Sector 32-A, Urban Estate, Jamalpur Ludhiana

revealed that cooperative learning has significant effect on different dimensions of social competence as measured by different test (Aronson et al. 1978; Lickona, 1991; Earley,1999; Lucas, 1999; Tripathy, 2004; Sharma and Sharma ,2008; Ebrahim, 2010; Shimazo and Aldrich, 2010; Leung, 2012;). Cooperative learning also improves Interpersonal relationships (Sharma & Sharma, 2008) and decreases levels of loneliness and social anxiety, increasing the levels of happiness among the participants (Kocak and Recep, 2012). Theoretical basis of cooperative learning and research studies have supported many social benefit of cooperative learning and most of the above cited research work is done on foreign soil. So keeping in mind the dearth of studies on Indian soil investigator framed following objectives:

Objective

- To compare adjusted mean scores of social competence of experimental and control group by taking pre- social competence scores as a covariate.
- To compare adjusted mean scores of social competence of boys and girls by taking pre-social competence scores as a covariate.
- To study interaction effect of group and gender in adjusted mean scores of social competence by taking pre-social competence scores as a covariate.

METHOD

Sample and sampling techniques

Purposive sampling technique was employed to select sample. A sample of 80 students of 9th grade was taken. Two intact section of 9th class from the S.D.P. Sr. Sec. School, Ludhiana affiliated to Punjab School Education Board were selected. Further, from existing two sections randomly one was assigned as experimental and another as control group.

Measure

Social Competence Scale developed by the Rani & Sharma, 2010 and Cooperative learning Modules based on STAD strategy developed by the investigator were employed to collect data.

Procedure

The study was designed to find the effectiveness of STAD on social competence of 9th class school students. Permission was taken from principal of the school for conducting the experiment. In the first step social competence scale was administered to 80 students as pre

test. Two intact sections of 9th class were taken and randomly one was selected as experimental group and another as control group. One group was assigned randomly to the treatment. This was termed as experimental group and the other was termed as control group. The experimental group was taught social science through STAD strategy (with modules prepared by investigator) for a period of thirty days at the rate of 35 min. per day. On the other hand control group was taught social science with the help of conventional (lecture) method for a period of thirty days at the rate of 35 min. per day. After completion of the treatment social competence scale was administered to both the groups as post test. The extraneous variables like influence and motivation of the teacher was controlled by teaching both groups by the investigator himself.

Results and Discussion

Table 1: Summary of 2x2 factorial design (ANCOVA) on scores of social competence in relation to group and gender

Source	Sum of Squares	df	Mean Square	F
Group	3178.03	1	3178.02	213.01**
Gender	22.05	1	22.05	1.47
Group* Gender	14.67	1	14.67	.98
Error	1118.96	75	14.91	
Total	1351559.00	80		

Note. ** Significant at .01 level

It is evident from the table 1 that reported F-value for adjusted mean scores of social competence is 213.01, which is significant at .01 level with df 1/75. It means that there is significant difference in adjusted mean scores of social competence between experimental and control groups. Hence, the null hypothesis, 'There will be no significant difference in the adjusted means scores of social competence of Control and Experimental group when pre-social competence scores are taken as covariate' was rejected at specified level. Further the adjusted mean scores of social competence of the experimental group (Mean=136.10, N=40) is higher than that of control group (Mean=123.32, N=40). It reflects that cooperative learning (STAD strategy) was found to be significantly effective to increase social competence as compared to traditional method of teaching.

The F value (table 1) for adjusted mean scores of social competence of boys and girls is 1.47, which is not

significant even at .05 level with df 1/75. It means that there is no significant difference in adjusted mean scores of social competence between male and female students. Hence, the null hypothesis, There will be no significant difference in the adjusted mean scores of social competence of boys and girls when pre-social competence scores are taken as a covariate was not rejected at specified level. It means both boys and girls do not differ significantly on the scores of social competence.

The F value (table 1) for interaction between treatment and gender is .98, which is not significant. Hence, the null hypothesis, There will be no significant interaction effect of group and gender on adjusted mean scores of social competence when pre-social competence scores are taken as covariate was not rejected at specified level. It means that there is no significant effect of interaction between treatment and gender on social competence. It may be concluded that groups and gender were independent of each other.

Conclusion

The paper revealed that Cooperative learning (STAD strategy) has an effect on social competence of school students. The results of the present study highlight and support the idea that cooperative learning strategies have a positive impact on social competence of school students. As NCF-SE (2005) emphasised that knowledge should be constructed and the approach should be learner-centred. STAD approach has characteristics which makes learner active in the teaching learning process. It can be an effective method in raising the social competence of students in comparison to traditional method. So, more research studies should be conducted to see the effectiveness of STAD and other cooperative learning strategies on social competence to generalize the result on Indian population.

References

Aronson, E. (1978). *The Jigsaw Classroom*. Beverly Hills, CA: Sage Publishing Company.
Earley, C. B. (1999). A descriptive study of interpersonal interaction in cooperative learning groups in 9th-11th grade social studies students. MAJ, 38/02, p. 324. In Dahiya, M. (2011). *A study of the effectiveness of student team achievement division (STAD) and*

group investigation (GI) methods of cooperative learning on high school students. An Unpublished Doctoral Thesis. M. D. University, Rohtak
Goldfried, M. R. & D'Zurilla, T. J. (1969). *Social Competence*. In Spielberger, C. ed. *Current topics in Clinical and community psychology*. New York: Academic. pp. 15196. Retrieved on May 16, 2009 from http://en.wikipedia.org/wiki/social_competence
Johnson, D. W. & Johnson, R. T. (1989). *Cooperation and competition: Theory and research*. Edina, MN: Interaction Book Company.
Kocak & Recep (2012). The effects of Cooperative Learning on Psychological and Social Traits among undergraduate students. *Social Behavior and Personality: an international journal*, vol.36, no.6.
Leung, C. H. (2012). Enhancing Social Competence and the Child-Teacher Relationship using a Child-centered Play Training Model in Hong Kong Preschools. *The Australian Journal of Educational and Developmental Psychology*. Retrieved from: www.academia.edu
Lickona, T. (1991). *Educating for character*. New York: Bantom Books. In Santosh (2012). *A Comparative Study of the Effectiveness of Student-Teams Achievement Divisions (STAD) and Jigsaw Methods of Cooperative Learning*. An Unpublished Doctoral Thesis, M.D. University, Rohtak.
Lucas, C. A. (1999). A study of the effects of cooperative learning on the academic achievement and self-efficacy of college Algebra students. *Dissertation Abstracts International- A 61/02, P.538*.
Rani, P. & Sharma, L. (2010). *Social competence of vocational stream students in relation to their family relationship, emotional maturity and academic achievement*. An Unpublished Doctoral Thesis in Department of Education, Panjab University, Chandigarh
Sharma, H.L. & Sharma, S. (2008). Cooperative learning: Highway to learning to live together. *Indian Journal of Teacher Education Anweshika*, 5(1), 78-94
Shimazoe, J. & Aldrich, H. (2010). Group work can be gratifying: Understanding and overcoming resistance to cooperative learning. *College Teaching*, 58(2), 52-57, Retrieved on March 16, 2012 from http://en.wikipedia.org/wiki/Cooperative_learning
Slavin, R. E. (1991). Synthesis of research on cooperative learning. *Educational leadership* 48,71-82.
Slavin, R. E. (1995). *Educational Psychology: Theory and Practice*. Boston: Allyn and Bacon.
Slavin, R. E. (1996). *Cooperative Learning has its greatest effects on student learning when groups are recognized or rewarded based on the individual learning of their group members*. Retrieved on November 15, 2010 from: <http://serc.carleton.edu/introgeo/cooperative/whyuse.html>
Tripathy, H. H. (2004). Cooperative Learning : A strategy for teaching Science. *Indian Journal of Psychometry and Education*, 35(1), 3 8.
Ebrahim, A. (2010). *The effect of cooperative learning strategies on elementary student's science achievement and social skills in Kuwait*. *International journal of science and mathematics education*, 32(2), 1-22

