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Application of Cooperative Learning Techniques to Academic Performance of 11th Class Civics Students

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Abstract: *In comparison to traditional learning approaches, Cooperative Learning (CL) is a modern teaching strategy for improving academic performance. Educational institutions in the developed states, as compared to that of developing states, make effective use of CL techniques to enhance students' academic achievements. This research is an attempt in that direction which is conducted on a sample of 70 male students of class 11th in the subject of Civics in Government Post Graduate College, Mardan. The 70 students were divided into two equal groups named experimental and control groups where the learning techniques, i.e., traditional and CL, were implemented. The impacts of both the learning methods on students' academic performance were investigated. It showed a significant difference in academic achievements of male students taught through the traditional methods and CL techniques. The findings also showed that CL has very positive impacts on students' social and academic behaviors, increases their interest in learning.*

Key Words: Traditional Learning, Cooperative Learning, Learning Techniques, Academic Achievements, Positive Interdependence, Individual Responsibility, and Group Processing

Introduction

Education is an organized and systematic process largely focusing on teaching and learning. The teaching methodology is crucial in the whole education process. In order to improve teaching effectiveness, a teacher must adopt proper and effective techniques for motivating and encouraging students to learn. In Pakistan, teachers mostly use the conventional method of teaching, where it is usually more difficult to encourage the majority of students in a classroom to understand difficult subjects. It is only the effective teaching methodology (the way to teach) that makes education more effective. An effective teaching method results in effective learning. Many techniques and methods have been developed for effective teaching. One of them is Cooperative Learning (CL) method which is very valuable for various subjects (Iqbal, 2004).

CL is an instructor-facilitated and learner-centred strategy of instruction in which small structured groups of students are responsible for their own learning and the learning of all group mates. The crucial characteristic of CL is that the gain of one student is the gain of others. According to Slavin (1982), cooperation is one of the crucial human activities. Elephants survive as a species due to their size, cheetahs as a result of their speed, and humans because of their cooperation for the group's interests. In modern times, people who coordinate as a team for accomplishing common goals are more successful in every field. These cooperative groups usually have an "all-for-one, one-for-all" approach in which group members facilitate each other. Atkinson (1964) says, "Achievement is a 'we thing', not 'a me thing', always the product of many heads and hands". In a competitive environment, students with high

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marks may not work hard because they know that, in any case, they will be position holders. It will also discourage the low graders because they will think that they cannot achieve high grades. In a CL setting, a student, while with his group members, will not be embarrassed by mistakes. The rectification and feedback from his group members will encourage him. CL inculcates in students a cooperative attitude, leadership responsibilities, active involvement in group process, constructive collaboration, and better learning (McManus & Gettinger, 1996).

Cohen (1994: 3) is of the opinion that CL is a method of teaching where "Students are working together in a group small enough that everyone can participate on a collective task that has been clearly assigned. Moreover, students are expected to carry out their task without direct and immediate supervision of the teacher" while Slavin (1984: 31), one of the foremost pioneers of CL, defines it as, "A set of instructional methods in which students are encouraged and required to work together on academic tasks".

The traditional teaching methodology is teacher-directed and teacher-centred, where students rarely interact with teachers. The teacher normally spends maximum time explaining curriculum and contents in class, and students passively listen to the lecture (Wang, 2017). CL is just opposed to the traditional classroom. Cooperation, and not competition (based on Darwinism), is the principal feature of human learning. CL methodology rewards the students and enhances their interdependence and cooperation in every task (Artz & Newman, 1990) and where students actively participate by using social skills to build knowledge and solve the problem (Matthews, Cooper, Davidson & Hawkes, 1995).

Similarly, only studying in groups is not the CL method. In simple group work, the students may continue to work individually or competitively, despite being physically working in a group. They may sit in the group while studying together without any communication with each other, and students in study groups will not affect each other positively. In CL, students work collectively on a non-competitive basis to accomplish a set task. Here students' efforts are appreciated and rewarded as a group. Here the students try to increase both their own and their friends' learning because the objectives of CL groups are achieved only when each member strives for the goals of all teammates.

A number of important elements are required for a successful implementation of the CL framework. For example, firstly, there must be *Positive Interdependence* which is the belief of the group members that they "sink or swim together." This means a) to understand and learn the assigned task, and b) to ensure that other teams have also learnt the assigned topic and where students believe that all the group members are so related that they can achieve and win only when their other group members do. Secondly, *Individual Accountability* means that everyone has to do his/her assigned job. Individual accountability exists when the work of each student is assessed, and each mate is responsible to the group members for his/her assigned duties for achieving the group's objectives. Each of the group mates must know that they do not "hitchhike". There should be no free-rider (social loafing). Thirdly, *Interpersonal and Small-Group Skills* means organizing efforts for realizing common goals and where learners should (a) trust each other, (b) communicate correctly, (c) accept and help/encourage/promote each other, (d) constructively resolve disagreements (Johnson, 1990, 1991; Johnson & Johnson, 1991), (e) listening attentively, (f) questioning cooperatively, (g) negotiating respectfully, and (h) cooperating effectively (Slavin, 1996). Fourthly, *Face-to-Face Promotive Interaction* occurs where students (a) provide each other with effective support (Johnson & Johnson 1981; 1984), (b) exchange needed resources like material, information more effectively (Laughlin & McGlynn, 1967), (c) provide feedback to each other for improving their performance (Ryan, 1982), (d) challenge each other's reasoning and conclusions for promoting greater insight and decision making (Johnson & Johnson, 1979; 2007), (e) work for achieving mutual goals (Wicklund & Brehm, 1976), (f) act in trustworthy ways (Deutsch, 1958, 1960), (g) struggle for collective benefit (Johnson & Johnson 1989, 2005). Fifthly, *Group Processing,* i.e. how well the group is functioning. Process means a particular sequence of actions taking place in due course. In Group Processing, students reflect on their working relationships and progress made. Sixthly *Heterogeneous Grouping,* i.e. groups should not be homogeneous and same for all tasks (Sonthara & Vanna, 2009: 7).

Three scholars who merit recognition for their academic contributions to CL are the two brothers David and Roger Johnson and Robert Slavin, who has been widely cited for their work on CL (Sapon-Shevin & Schniedewind, 1992). Slavin (1996) considers CL research outcomes as one of the most successful stories in human history, which has contributed towards enhancing the overall performance of the students. CL compared with individualistic and competitive learning results in more efforts to show greater productivity, higher achievements, promoting learning, creating new ideas, using of higher reasoning, greater motivation, greater retention, the greater transmission of what has been learned, thus promoting good oral communication (Johnson, 2006; Sonthara & Vanna, 2009: 4). It promotes high-quality relations among students, e.g. greater interpersonal liking, attraction, esprit de corps and valuing of heterogeneity, greater personal support, improving mixed-race interaction, creating more cross-race friendship by replacing racism with empathy (Johnson & Johnson, 1990). It helps in better psychological adjustment, better psychological health, higher self-esteem, confidence, greater ability to deal with stress and a shared identity.

There are a number of theories which support cooperative learning for example, *Cooperative Learning Theory* (the positive outcome of CL is because of the four central principles of positive interdependence, individual accountability, equal participation and simultaneous interaction); *Classic Learning Theory* (based on Reinforcement, Correction Opportunities, Practice Opportunities, and Transference); *Social Learning Theories* (when other successful persons are watched, they are followed, "Monkey see, monkey do"); *Brain-Based Learning Theory* (brain learns best through some ways of teachings; *Motivation Theories* (work motivation is an important element of the process and holds that mostly processes are influenced by motivation); *Individual Differences Theories* (individuals have differences in their personality styles, cognitive styles, learning styles and multiple intelligences); *Expectation Theory* (teacher who expects less of students give them less difficult work); *The Power of the Situation* (our behaviors and actions are highly based on situational variables and not on personality variables); *Social Cohesion Theory* (the effects of CL on achievement are mediated strongly by the group's cohesiveness); *Cognitive Theory* (students' interactions will increase students' achievement mainly as a result of mental processing of information instead of motivations); *Socio-cultural Theory* (groups of people functioning together by virtue of shared cultural practices); and *Social Interdependence Theory* (the students' interaction is defined mainly by the way the teacher structures goals in the classroom) (see for explanation Cohen, 1986: 69–70; Kagan & Kagan, 2009: Chap. 4; Slavin, 1995; Vygotsky, 1978: 86).

Thousands of studies have been conducted to compare CL to a variety of control methods. More than fifty years of thorough research has produced hundreds of research studies and reviews on CL since the late 19th century, where both social dynamics and learning outcomes of CL have been thoroughly investigated under a variety of settings. Slavin (1990) regards it as "One of the most thoroughly researched of all instructional methods and one of the greatest educational innovations of recent times".

The effects of CL techniques on academic achievements have been investigated in about every discipline, in all kinds of educational settings and at all grade levels in many states. Both laboratory and field studies have accumulated a large amount of academic knowledge on the impacts of several kinds of cooperative interventions and the mechanisms responsible for these effects. CL is used as a teaching methodology by teachers in many of the states. Interest in CL gathered impetus in the 1980s when the first meta-analysis investigating 122 studies was published. The findings showed that cooperation was more effective than individualistic and competitive structures; even cooperative efforts in the intergroup competition were greater than individualistic and interpersonal efforts. Johnson & Johnson (1989) also found that learners working cooperatively learned more as compared to individualistic and competitive learning. In addition, learners in cooperative settings enjoyed the subject mattered more (>0.60) with a higher level of self-esteem (>0.40) and were more accepting and inclusive of diversity (>0.60).

Joyce (1991), in his study also explored the effects of CL on a) interaction and achievements of learners, b) dynamics of interaction among males and females in various groups, c) academic achievement in every group composition, and d) the effects of group rewards on control and

experimental groups. The results showed that a) males and females showed increased achievement, b) as compared to females, males performed a little higher on achievement measures, c) males got more assistance than females, d) males rendered more assistance to males than females, and e) females rendered more assistance than males irrespective of the sex of the helpee.

Thus the effectiveness of CL as a teaching methodology that enhances both learning and socialization is highly supported by studies conducted by Johnson et al. (1981), Slavin (1989) and Johnson & Johnson (2002). All these studies attest to the benefits learners derive by cooperating with others. Acar and Tarhan (2007) also examined the effects of CL on learners' understanding. The finding showed a mean score of 78.60 for the experimental group, while for the control group, it was 54.33.

The present study was conducted on a sample of 70 students of class 11th in the subject of Civics in Government Post Graduate College, Mardan. The 70 students were divided into two equal groups. These groups were named experimental and controlled groups where the learning techniques of traditional and cooperative learning were implemented. Furthermore, the impacts of both learning methods on the learning of students were also compared. The main objectives of the study were**:**

a) To study the effects of cooperative learning techniques in the subject of Civics on the academic achievements of 11th class male college students.
b) To assess the interest and attitudes of the students towards CL.
c) To give implementable suggestions for teaching the subject of Civics through cooperative learning techniques to students and teachers of the college level.

The study had the following hypotheses

a) There is no significant effect of cooperative learning techniques in the subject of Civics on the academic achievements of male college students.
b) There is no significant difference in the academic achievements of college male students in the subject of Civics taught through the traditional methods and cooperative learning techniques.

Methodology

This study is experimental in nature. Tests were conducted on two groups of students, control and experimental, having 35 students each. After about two months, the performance of the two groups was evaluated on the basis of a pre-test and post-test design. The pre-test was conducted to obtain the pre-test score of both the control and treatment group, and then the CL techniques were applied to the sample. After the treatment, a post-test was applied, and the scores obtained were analyzed. All the 10 male colleges of District Mardan was the population of this study. However, by non-random selection and convenient sampling technique Government Post Graduate College, Mardan was selected. The criterion was that it is situated in the city and is economical in terms of resources, labour and time.

This college has Inter classes 11th and 12th and BS programs in 16 disciplines. For the purpose of this research, Civics students of the 11th class were selected as a sample of the studies for which written permission was taken from the principal of the college. There were 70 students in the Civics class. They were randomly divided into two equal groups (aged from 16-17 years), having no significant differences, with one group called the control group while the other group was the experimental group.

Two tests were developed for identifying the results' scores of lessons "Political System" and "Plurality and its Remedies" in pre-test and of lessons "Forms of Governments", "Rights" and "Political Economy" in the post-test of both the experimental and control group. A questionnaire of 22 items was also developed to assess students' perception of CL. Both the pre-test and post-test included 25 multiple choice questions, which focused on learners' knowledge of Civics of the chapters covered, with each question having four alternative options of the correct answer. Each question carried 4 marks, so each test was 100 marks. These tests were pilot tested with the students of the 12th class who had been taught Civics of 11th class the previous year, and the content validity of the tests was assessed and reviewed by three Civics teachers. The experimental group's students were taught through CL techniques of *Pair, Think, Share* and *Jigsaw,* while the control group's students were taught through the traditional methods of teaching. Till November 20, 2019, the course of

Civics was taught using only traditional lecture methods. On November 21, 2019, the class was divided into two groups. Both the groups included students from high achievers to low achievers. Both the groups were given a pre-test, and the score of the students was recorded. No significant difference was observed in the pre-test scores of both groups. From November 21, 2019, to January 31, 2020, the control group was taught Civics lessons "Forms of Governments", "Rights" and "Political Economy" with traditional method while the experimental group was taught these lessons using CL applying two CL techniques, namely, *Think/Write, Pair, Share* and *Jigsaw*. Both the groups were taught by the same teacher, 6 days a week, with each class taught for 1 hour. In the experimental group, the teacher-directed the students to learn the contents of Civics.

Data were analyzed by applying a t-test. Results obtained from both the control group, which acted as a traditional class and the experimental group taught with cooperative learning techniques, were compared.

Results and Discussion

The study examined the impacts of both learning methods on students' academic performance. It should be kept in mind that when the control group and experimental group were formed and a pre-test was conducted, the result showed no significant variation between the scores of the two groups. As Table 1 shows, for Pearson Chi-Square, Likelihood Ratio and Linear-by-Linear Association, it was 0.130, 0.073 and 0.036, respectively. These findings show that both the control and experimental groups had similar compositions with no significant difference when the pre-test was given to both the groups.

Table 1. Chi-Square Test for Identifying Difference between Control and Experimental Groups

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.414[a]	16	.130
Likelihood Ratio	24.817	16	.073
Linear-by-Linear Association	4.374	1	.036

(a. 25 cells (100.0%) have an expected count less than 5. The minimum expected count is .10.)

The summary statistics for pre and post-tests for the control group are given in Table 2. The Table shows that the mean value of pre-test score for Civics lessons of "Political System" and "Plurality and it Remedies" is 56.19±4.15, with the standard error of the mean as 0.654 while for Civics lessons of "Forms of Governments", "Rights" and "Political Economy" post-test it was 56.51±4.343 with the standard error of the mean as 0.689. This shows that the means for both the pre-test and post-test are similar and very narrowly spread out.

Table 2. Summary Statistics for Control Group's Pre and Post Tests Scores

	Control Group Pre-Test Score	Control Group Post-Test Score
N Valid	35	35
Mean	56.19	56.51
Std. Error of Mean	0.654	0.689
Std. Deviation	4.150	4.343

The experimental group was examined in the pre-test on the basis of the traditional method, which was followed by cooperative learning and was post-tested in Civics lessons of "Forms of Governments", "Rights", and "Political Economy" on the basis of CL. Table 3 shows the summary statistics for pre-test and post-test for the experimental group. The Table shows that the mean value of the pre-test score for Civics lessons of "Political System" and "Plurality and it

Remedies" is 56.31±4.712, with the standard error of means as 0.763. On the other hand, for Civics lessons of "Forms of Governments", "Rights" and "Political Economy" post-test, the mean was 81.34±5.137 with the standard error of the mean as 0.786. This shows that there is a significant difference of 25.03 between the means of the post-test score and pre-test score, showing that the experimental group depicts good results.

Table 3. Summary Statistics for Experimental Group Pre and Post Tests Scores

	Control Group Pre-Test Score	Control Group Post-Test Score
N Valid	35	35
Mean	56.31	81.34
Std. Error of Mean	0.763	0.786
Std. Deviation	4.712	5.137

The t-test results for the control group pre-test, post-test scores and experimental group, pre-test, the post-test score given in Table 4 below also show very high support for the CL. The means difference of the post-test and pre-test score for the experimental group is 25.03, which is highly significant, while for the control group, it is only 0.32, which is highly insignificant, showing that cooperative learning techniques are highly effective in the subject of Civics generally and in the lessons of "Forms of Governments", "Rights" and "Political Economy" specifically hence, has positive effects on the academic achievements of male college students. Again, the difference between the means of pre-tests of the experimental group and control group was 0.12 (56.31-56.19), while the difference between the means of the post-tests of the experimental and control groups was 24.83 (81.34-56.51). The results also show that CL increases students' academic achievements in the subject of Civics. These findings are substantiated by the study conducted by Acar & Tarhan (2007), whose study showed a mean score of 78.60 for the experimental group, while for the control group, it was 54.33.

Table 4. Paired Sample Statistics for both the Control and Experimental Group

Control Group					Experimental Group				
	Mean	N	Std. Deviation	Std. Error Mean		Mean	N	Std. Deviation	Std. Error Mean
Post-Test	56.51	35	4.343	0.689	Post-Test	81.34	35	5.137	0.786
Pre-Test	56.19	35	4.150	0.654	Pre-Test	56.31	35	4.712	0.763

The results of the study reject our first null hypothesis (H_0), which says that there is no significant effect of cooperative learning techniques in the subject of Civics on the academic achievements of male college students. It accepts our alternative hypothesis (H_1) and shows that cooperative learning techniques have very significant effects on the academic achievements of male college students in the subject of Civics. The results of the study also reject our second null hypothesis (H_0), which says that there is no significant variation in the academic achievements of male college students in the subject of Civics taught through the traditional method and cooperative learning techniques. The results clearly support the alternative hypothesis (H_1) and show that there is a significant difference in the academic achievements of male college students in the subject of Civics taught through the traditional method and cooperative learning techniques.

The t-test statistics for the control group also show no significant difference between the post-test score and the pre-test score, as is depicted by the following Table 5. The Table shows the paired difference mean as 0.195 with the standard deviation as 1.990 and standard error mean as

0.311. The 95% confidence interval of the difference is -0.433 and 0.823, lower and upper limits, respectively. The t-test value is 0.628, and the degree of freedom is 40. The significance value is 0.534, which is highly insignificant. This shows that the difference between post-test and pre-test scores for the control group is highly insignificant.

Table 5. Paired Samples Test Statistics for the Control Group

	Paired Differences					T	Df.	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair1 Post-test – Pre-test	0.322	1.990	.311	-.433	.823	.628	40	.534

However, the t-test statistics for the experimental group show a significant difference between the post-test score and the pre-test score, as is depicted by the following Table 6. The Table shows the paired difference mean as 25.03 with the standard deviation as 3.030 and standard error mean as 0.479. The confidence interval of the difference is 95%, with a lower value of 22.531 and an upper value of 24.469. The t-test value is 49.056 with a degree of freedom of 39. The significance value is 0.000, which is highly significant. This shows that the difference between post-test and pre-test scores for the experimental group is highly significant.

Table 6. Paired Samples Test Statistics for the Experimental Group

	Paired Differences					T	Df.	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair1 Post-test –Pre-test	25.03	3.030	.479	22.531	24.469	49.056	39	.000

As far as the assessment of the interest and attitudes of the students towards the various aspects of CL are concerned, the findings of the study show that they had very positive attitudes towards them. The various aspects of CL were divided into three parts. The first part was to assess the attitudes of the students towards their work and assignment; the second part was related to their attitudes towards their interest and opinion regarding CL, while the third part showed their attitudes towards their performance in CL.

As Table 7 shows, the students showed a very positive attitude towards all of the 8 items covered in the first part (students' attitudes towards their work and assignments), with no student strongly disagreeing with any of the statements. For example, 74.28% of the respondents said that when they worked in a group, they did better quality work. 8.57% of the students were undecided, while 17.14% disagreed with the statement. Similarly, 82.85% of the students said that when they worked in a group, they ended up doing most of their work, with 8.57% both undecided and disagreeing with the statement. Likewise, 85.71% of the respondents said that their work was better organized when they were in a group, with 5.71% undecided and 8.57% disagreeing with the statement. They also said that their workload was usually less when they worked with other students (80%). In the same way, 77.14% of the students said that their job was not done until everyone had finished the assignment, with 8.57% undecided while14.29% disagreed with the statement. Similarly, 74.28% of the respondents said that they could not complete their assignment unless everyone contributed, with 11.43% undecided and 14.29% disagreeing with the statement. A very high percentage (88.58%) of the respondents declared that when they worked in a group, their work habits improved, with 5.71% both undecided and

disagreeing with the statement. Likewise, 77.14% of the respondents were of the opinion that it took less time to complete their assignment when they worked with others, with 11.43% both undecided and disagreed with the statement. These findings show that CL has very positive impacts on students' social and academic behaviors.

Table 7. Attitudes of Students towards their Work and Assignments

Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
I do better quality work when I work in a group.	13 37.14%	13 37.14%	3 8.57%	6 17.14%	0 0%	35 100%
I end up doing most of the work when I work with others in a group.	16 45.71%	13 37.14%	3 8.57%	3 8.57%	0 0%	35 100%
When I work with others in the group, my work is better organized,	16 45.71%	14 40.0%	2 5.71%	3 8.57%	0 0%	35 100%
When I work with other students in the group, the workload is normally less.	13 37.14%	15 42.86%	3 8.57%	4 11.43%	0 0%	35 100%
Our work does not complete until everyone has finished the assignment.	14 40.0%	13 37.14%	3 8.57%	5 14.29%	0 0%	35 100%
We cannot complete our target unless everyone contributes.	17 48.57%	9 25.71%	4 11.43%	5 14.29%	0 0%	35 100%
My work habits improve when I work in a group with others.	19 54.29%	12 34.29	2 5.71%	2 5.71%	0 0%	35 100%
When I work with others, it takes less time to complete the task.	13 37.14%	14 40.0%	4 11.43%	4 11.43%	0 0%	35 100%

Similarly, as Table 8 shows, the respondents showed a very positive attitude towards the various items grouped in part 2 (attitudes of students towards their interest and opinion regarding CL), with no student strongly disagreeing with any of the statements. For example, 91.43% (62.86% strongly agree, while 28.57% agree) of the respondents said that they took more interest in cooperative learning than traditional learning. Again, 80% of the students responded that the material was more interesting when they worked with other students. Similarly, 77.14% of the students said that they enjoyed the material more when they worked with other students. Likewise, 85.72% of the respondents said that their group members respected their opinions, with 2.86% undecided and 11.43 disagreeing with the statement. In the same way, the majority of the respondents (82.85%) opined that they liked to help their group members learn the material, with 8.57% both undecided and disagreed with the statement. Similarly, 88.57% of the respondents said that they wanted not to remain absent when the learning method was cooperative. These findings show that CL increases students' interests in learning with a positive impact on their opinion about the various aspects of CL.

Table 8. Students' Attitude towards their Interest and Opinion Regarding CL

Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
I take more interest in cooperative learning than traditional learning.	22 62.86%	10 28.57%	1 2.86%	2 5.71%	0 0%	35 100%
When I work with other students in the group, the material becomes more interesting.	14 40.0%	14 40.0%	2 5.71%	5 14.29%	0 0%	35 100%

Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
When I work with other students in the group, I enjoy the material more.	17 48.57%	10 28.57%	3 8.57%	5 14.29%	0 0%	35 100%
My group members respect my opinions	15 42.86%	15 42.86%	1 2.86%	4 11.43%	0 0%	35 100%
I like to support the members of my group learn the material	16 45.71%	13 37.14%	3 8.57%	3 8.57%	0 0%	35 100%
I want not to remain absent when the learning method is cooperative	15 42.86%	16 45.71%	2 5.71%	2 5.71%	0 0%	35 100%

Lastly, as Table 9 shows, the respondents also showed a very positive attitude towards the various items grouped in part 3 (attitudes of students towards their performance in CL), with no respondent strongly disagreeing with any of the statements. For example, 82.86% of the respondents said that when they worked in a group, they got a high grade. In the same vein, 85.72% of the students said that their grades depended on how much they all learned. Similarly, 85.71% of the students were of the opinion that their group's members helped explain things that they did not understand. Again, 82.86% of the students said that when they worked in a group, they were able to share their ideas. Similarly, a great majority of 85.71% of the students said that the material was easier to understand when they worked with other students. Likewise, a very high percentage of the respondents (88.57%) were of the opinion that they learnt more information when they worked with other students. In the same way, 80% of the students said that they also learnt when they taught the material to their group members. Lastly, a high percentage of the respondents (82.86%) declared that they felt they were part of what was going on in the group.

Table 9. Attitudes of Students towards their Performance in CL

Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
When I work in a group, I get a high grades.	14 40.0%	15 42.86%	1 2.865	5 14.29%	0 0%	35 100%
My score depends on how much we all learn.	19 54.29%	11 31.43%	1 2.86%	4 11.43%	0 0%	35 100%
My group's members help explain things that I do not understand.	17 48.57%	13 37.14%	3 8.57%	2 5.71%	0 0%	35 100%
I am able to share my ideas when I work in a group with others.	15 42.86%	14 40.0%	2 5.71%	4 11.43%	0 0%	35 100%
The material is easier to understand when I work with other students	13 37.14%	17 48.57%	2 5.71%	3 8.57%	0 0%	35 100%
When I work with other students, I learn more information.	17 48.57%	14 40.0%	2 5.71%	2 5.71%	0 0%	35 100%
I also learn when I teach the material to my group members.	13 37.14%	15 42.86%	3 8.57%	4 11.43%	0 0%	35 100%
I believe I am a part of what is going on in the group	12 34.29%	17 48.57%	2 5.71%	4 11.43%	0 0%	35 100%

The above findings clearly show that CL has very positive impacts on students' social and academic behaviors, increases their interest in learning with a positive impact on their opinion about the various aspects of CL and has very positive effects on students' academic performance.

Conclusion and Recommendations

We do not have anyone "right way" to use cooperative learning, and it can be understood in many ways. Some teachers use informal ways of organizing groups to promote academic achievements and skills. This experimental study was conducted in Government Post Graduate

College, Mardan, on a sample of 70 male students of class 11th in the subject of Civics. The main objectives of this study were to investigate the effects of CL techniques in the subject of Civics on the academic achievements of male students.

The results of the study showed that the experimental group surpassed the control group in performance and academic achievements. The experimental group showed better academic results and showed a very positive attitude towards the various aspects of CL. For example, the mean value for Civics lessons of the control group's pre-test score was 56.19±4.150, and for post-test, it was 56.51±4.343 (Table 2). On the other hand, the findings for pre and post-tests of the experimental group showed that the mean value for Civics lessons' pre-test score was 56.31±4.712, while for Civics lessons' post-test, it was 81.34±5.137. This showed a significant difference of 25.03 between the means of the post-test score and pre-test score, showing that the experimental group depicted good results (Table 3). Similarly, the difference between the means of pre-tests of the experimental group and control group was 0.12 (56.31-56.19), while the difference between the means of the post-tests of the experimental and control groups was 24.83 (81.34-56.51). The results showed that the students of the experimental group outperformed their counterparts in the control group in academic performance and gaining positive social skills.

As far as the assessment of the interest and attitudes of the students of the experimental group towards the various aspects of CL are concerned, the results of the study revealed that they had very positive attitudes towards them (see Tables 7, 8 and 9). The results of the study rejected both of the null hypotheses (H_0) and supported our alternative hypotheses (H_1), and showed that CL techniques had very significant effects on the academic achievements of male college students in the subject of Civics and that there was a significant difference in the academic achievements of male college students in the subject of Civics taught through the traditional method and cooperative learning techniques.

Recommendations

Keeping in view the results of this study, the researchers put forward some practical recommendations for the policymakers for the effective implementation of CL.

a) Cooperative learning needs to be encouraged in educational institutions as it positively affects the academic performance and achievements of students.
b) Training for the teachers is very important. Unless they are equipped with the proper knowledge and understanding of the method, all other efforts in that direction will go futile. The government needs to make proper, optimal, adequate and necessary arrangements for providing proper and adequate training and other refresher courses to the teachers. Educational research shows that difficulties in the use of CL can generally stem from teachers' lack of adequate training in the methods and its techniques (Fafard, 1992).
c) As CL is an innovative method, it needs necessary changes, additions and omissions in the education policies, syllabi and structures of the educational institutions. So it is suggested that the needed changes, additions and omissions in the given areas may be taken as policy agenda items by the government.

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