

Pedagogical Utility of Cooperative Writing Technique through Performance-oriented Classroom Structure

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Abstract

There is controversy on the conditions under which cooperative learning methods can improve academic achievement. Group-specific motivational aspects might contribute to the effectiveness of cooperative learning among which classroom goal structures were focused on. More specifically, the study aimed at investigating the efficiency of cooperative writing technique through performance versus mastery-oriented classroom goal structures in improving academic writing of Iranian intermediate EFL learners. To this end, 83 intermediate EFL learners took part in this quasi-experimental pretest, post-test study. The participants were required to write a 5-paragraph essay for pretest and post-test. The collected data was analyzed based on an analytic writing rubric (Hedgcock & Leftkowitz, 1992). The results of one-way ANOVA tests indicated that the experimental group which practiced cooperative writing through performance goal orientation outperformed the individual and mastery-oriented classes. It was concluded that performance goal orientation, between-groups competition, and extrinsic motivation, can help EFL teachers in setting a more effective classroom structure for cooperative writing practices to improve the writing proficiency of L2 learners.

Keywords: Cooperative writing, classroom goal structures, performance goal orientation, mastery goal orientation, writing proficiency

Introduction

Cooperative learning refers to teaching methods in which students work together in small groups to help each other learn academic content, perform instructional tasks, and achieve common goals (Gillies, 2016). While researchers generally agree that cooperative learning can positively affect students' achievement, there is controversy on why and how various cooperative learning methods affect achievement and the conditions under which cooperative learning might be effective (Rohrbeck et al., 2003; Roseth et al., 2007; Sharan, 2002; Slavin, 2010, 2013; Webb, 2008). There are various viewpoints on the achievement effects of cooperative learning including motivational, social cohesion, interdependence, and achievement goal theories (Slavin, 2014), among which group-specific motivational perspective (Dornyei, 1997) as well as achievement goal-orientation (Anderman & Wolters, 2005, Pintrich, 2000) build up the theoretical background of this study. More specifically, this study intends to investigate the efficacy of cooperative writing technique through performance-oriented and mastery-oriented classroom goal structures to improve academic writing proficiency of adult EFL learners at tertiary education.

In cooperative learning, classroom learning takes place within groups as organizational units. These units are powerful social entities that influence student affects and cognitions. With respect to L2 motivation, four aspects of group dynamics are particularly relevant: 1) goal-orientedness, 2) norm and reward system, 3) group cohesion, and 4) classroom goal structures (Dornyei, 1997). A group goal is best regarded as a composite of individual goals that is an "end state desired by a majority of the group members" (Dornyei, 1994a, p. 275). The extent to which the group tries to achieve its goal is referred to as goal-orientedness. The group's norm and reward system is one of the most salient classroom factors that can affect student motivation. Group cohesion is the relationship of members to one another and to the group itself (Dornyei, 1994a). Classroom goal structures can affect student motivation by providing cues that inform students about their capabilities (Pintrich & Schunk, 2002). According to Dornyei and Ushioda (2011, p.27), "classroom goal structures can be competitive (where the focus is on how students perform relative to one another), cooperative (where students work together to achieve a shared goal), or individualistic (where the focus is on individual learning goals)".

On the other hand, achievement goal theorists focus on students' intentions or reasons for engaging, choosing, and persisting at different learning activities. Early research on achievement goals focused on two contrasting forms of motivation that have been labeled learning versus performance (Dweck & Elliot, 1983), task-involved versus ego-involved (Nicholls, 1984), mastery versus ability focused (Ames, 1992a; Ames & Archer, 1988), and task-focused versus ability-focused (Maehr & Midgley, 1991). In this study, *mastery* and *performance* (Pintrich & Schunk, 2002) are used to describe these different goal orientations.

Literature Review

Motivational perspective on cooperative learning

According to three-level framework of L2 Motivation proposed by Dornyei (1994a), the third level of L2 motivation is dedicated to the learning situation, which is made up of intrinsic and extrinsic motives and motivational conditions concerning three areas: 1) course-specific motivational components, 2) teacher-specific motivational components, and 3) group-specific motivational components which includes four main sub-components: goal-orientedness, norm and reward system, group cohesion, and classroom goal structure. Classroom goal structure includes three possibilities: in a competitive structure, students work against each other and only the best ones are rewarded; in a cooperative situation, students work in small groups in which each member shares responsibility for the outcome and is equally rewarded; finally in an individualistic structure, students work alone, and one's probability of achieving a goal or reward is neither diminished nor enhanced by a capable other (Dornyei, 1994a). There is consistent evidence from preschool to graduate school settings that, compared to competitive or individualistic learning experiences, the cooperative goal structure is more powerful in promoting intrinsic motivation since it results in less anxiety, more task engagement, and more positive attitudes towards the subject area, peers and the teacher (Dornyei, 1997).

Considerable evidence from practical applications of cooperative learning in elementary and secondary schools supports the motivationalist position that group rewards are essential to the effectiveness of cooperative learning, with one critical qualification. That is, use of group goals or group rewards enhances the achievement outcomes of cooperative learning if and only if the group rewards are based on the individual learning of all group members (Slavin, 1995). Most often, this means that team scores are computed based on average scores on tests which all teammates take individually, without teammate help. Thus, the only way the team can succeed is to ensure that all team members have learned the content, so the team members' activities focus

on explaining concepts to one another, helping one another practice, and encouraging one another to achieve the final goal (Slavin, 2014). In contrast, if group rewards are given based on a single group product, there is little incentive for group members to explain concepts to one another, and one or two group members may do all the work (Slavin, 1995).

Empirical studies on cooperative learning

In a meta-analysis of 66 studies that examined the effects of within-class grouping (i.e., establishing small groups in classes) on student achievement at the elementary, secondary and postsecondary levels, Lou et al. (1996) found that students achieved higher learning outcomes when they worked in small cooperating groups than when they were not grouped or remained in whole-class teaching arrangements. The key difference Slavin (2014) argued between the studies that included these criteria and others is the importance attached to group members working together as a team to attain group rewards. Whereas, traditional unstructured group work where students are expected to work together but with few incentives to do so has little or no effect on learning. Similar results have been reported by Gillies (2008, 2014, 2016) who has consistently found that students obtain higher learning outcomes and they are more willing to cooperate when they work in structured small groups where they are interdependently linked together so that all group members understand that they must contribute if the group is to achieve its goal. In contrast, in unstructured groups, students work in groups where members are not interdependently linked and there is little or no expectation to contribute to the group's goal.

In a more recent meta-analysis of 148 independent studies comparing the relative effectiveness of cooperative, competitive, and individualistic goal structures, Roseth, Johnson and Johnson (2008) found that higher achievement and more positive peer relationships were associated with cooperative rather than competitive or individualistic goal structures. On the contrary, Marashi and Dibah (2013) reported that EFL learners generally benefitted more from the competitive setting compared to the cooperative one.

On the other hand, only few studies were conducted that investigated extrinsic goals orientation as a distinct variable. These studies found that in general, this orientation is associated with a maladaptive attitude toward achievement: placing a lower value on the task, reporting higher achievement anxiety, admitting to relatively more cheating, and using self-handicapping strategies (Anderman, Griesinger, & Westerfield, 1998; Ryan & Pintrich, 1997; Wolters, Yu, & Pintrich, 1996). However, the work concerning extrinsic goal orientation could benefit from a more thorough exploration and from a clearer definition of this construct.

Achievement Goal Theory on Classroom Goal Structures

Along with providing a framework for studying individual differences in students' motivation, achievement goal theory is also useful for analyzing the influence of classroom environments on students' motivation and learning patterns. Research focused on the classroom has examined how teachers may create different goal structures in the classrooms through their use of various instructional, evaluation, and grouping strategies (Kaplan et al. 2002b). For example, some teachers are known to differ in their use of ability grouping or competitive grading practices, which can increase the salience of performance goals. Other teachers focus on skill development, mastery, and improvement, which can lead students to adopt a mastery orientation.

According to the TARGET system, developed by Ames, 1992a, a mastery goal orientation is defined in terms of a focus on developing one's abilities, mastering a new skill, trying to accomplish something challenging, and trying to understand learning materials. Success

is evaluated in terms of self-improvement, and students derive satisfaction from the inherent qualities of the task, such as its interest and challenge. By contrast, a performance goal orientation represents a focus on demonstrating high ability relative to others, striving to be better than others, and using social comparison standards to make judgments of ability and performance. A sense of accomplishment is derived from doing better than others and surpassing normative performance standards.

Mastery-oriented classroom structure

Mastery goals orientation refers to an individual's purpose of developing competence. Mastery-oriented students focus on learning, understanding, developing skills, and mastering information. More generally, mastery goals orientation can be said to refer to a purpose of personal development and growth that guides achievement-related behavior and task-engagement (Ames, 1992a). Students' endorsement of mastery goals orientation has been regularly found to be associated with positive outcomes such as self-efficacy, persistence, preference for challenge, self-regulated learning, positive affect and well-being (Kaplan, Middleton, Urdan, & Midgley, 2002b; Midgley, 2002; Pintrich, 2000a; Urdan, 1997).

These relations of mastery goals orientation with such positive outcomes has been supported by experimental, correlational, as well as qualitative research. For example, eliciting a mastery goals orientation in experiments was found to be related to positive coping, persistence, and positive emotions (Elliott & Dweck, 1988), self-regulated learning (Graham & Golan, 1991), transfer of problem-solving strategies and achievement on task (Bereby-Meyer & Kaplan, 2005). Some longitudinal–correlational studies that controlled for previous achievement and perceived ability found that mastery goals orientation predicted interest and continuing motivation (Cury, Elliot, Da Fonseca, & Moller, 2006; Harackiewicz, Barron, Taur, & Elliot, 2002b).

However, one ambiguous issue has been the relation of mastery goals orientation with school achievement. Some correlational studies, conducted mostly in K-12 settings, found positive relations between mastery goals orientation and classroom achievement (Brookhart, Walsh, & Zientarski, 2006; Meece, Anderman & Anderman, 2006), whereas other studies, conducted mainly in college settings (Cury et al., 2006; Grant & Dweck, 2003), did not find such relations (Harackiewicz, Barron, Carter, Lehto, & Elliot, 2000). These different findings may be related to the type of assessment and tasks employed (Barron & Harackiewicz, 2000).

Performance-oriented classroom structure

Performance goals orientation refers to the purpose of demonstrating competence (Ames, 1992a; Dweck, 1986). Performance-oriented students focus on managing the impression that others have of their ability: attempting to create an impression of high ability and avoid creating an impression of low ability (Dweck, 1986). Often, this is done through comparison with others' ability (Nicholls, 1984). Unlike the findings concerning mastery goals, research findings concerning performance goals are inconsistent. Often, performance goals orientation has been associated with a maladaptive pattern of cognition, affect, and behavior (Ames, 1992a). For example, performance goals orientation was found to be associated with use of surface rather than deep learning strategies and with negative affect in events involving challenge or difficulty (Ames, 1992a). However, a few studies did not find such negative characteristics. Moreover, whereas some studies found no associations between performance goals orientation and positive outcomes, others have found weak or even moderate associations between this orientation and variables such as self-efficacy, use of effective learning strategies, grades, and positive attitudes and affect (Urdan, 1997). In recent years, some researchers argued that performance goals could

be beneficial in certain contexts (e.g., a competitive college setting) and for older students (Harackiewicz et al., 2002b; Pintrich, 2000a). However, other researchers argued that performance approach goals would lead students to focus on strategies that aim at enhancing demonstration of ability rather than at learning, and therefore might contribute to grades but not necessarily to understanding and deep processing (Midgley et al., 2001).

Iranian studies on classroom structure

Classroom goal orientation was also investigated in Iranian context focusing on learning English as a foreign language. Jahedizadeh, Ghanizadeh, and Ghonsooly (2016) claimed that students' perceptions of mastery goal orientation have positive effects on students' language-related achievement. The results also indicated that two internal demotivators namely; experiences of failure and lack of interest affect students' mastery goal orientation negatively and significantly. The findings of another recent study (Allahdadi et al., 2016) also demonstrated a negative relationship between student burnout and their mastery goal orientation in EFL learning. Mohammadi Ghavam, Rastegar & Razmi, (2011) reported that there was a significant positive relationship between mastery approach goal orientation and metacognitive reading strategies use. Reviewing the related literature, it became clear that most studies on cooperative learning focused on competition among group members in which the class was considered to be a large group but not the competition between subgroups in the same class. Moreover, few studies have focused on extrinsic goal orientation as a distinct variable. On the other hand, the effects of classroom goal orientation on academic achievement are still ambiguous regarding the controversy of the findings of studies especially in tertiary education. Furthermore, the previous studies of goal orientation concentrated on academic achievement in general with a really limited focus on specific academic courses or skills. One of the fundamental skills required in tertiary education is academic writing. Generally, academic writing courses might consist of grammatical instruction, paragraph development, and essay writing modules. These courses commonly follow individualistic approach in which students write their own composition inside or out of the class as homework assignments. However, writing has long been claimed to be a very difficult skill to acquire. This task is even more challenging for L2 learners specially low-ability students. According to Hamp and Heasley (2006, p.2), "Competent writing is frequently accepted as being the last language skill to be acquired for native speakers of the language as well as for foreign/second language learners". One of the practical strategies to develop writing proficiency is cooperative writing; however, there is controversy on the conditions under which this technique might be effective.

Thus, in an attempt to improve the writing proficiency of Iranian adult intermediate EFL learners, this study tried to reconcile the findings of motivational perspective on cooperative learning with classifications of classroom goal structures proposed by achievement goal theory. It aimed at adding more empirical evidence to our understanding of the conditions under which cooperative learning methods might be more productive and extending the scope of studies on classroom goal-orientation to foreign language learning context in tertiary education. The research question that guided the study was:

Q. what are the differences between mastery-oriented and performance-oriented classroom structures in improving the writing proficiency of intermediate EFL learners based on cooperative writing technique?

In other words, this study sought to find out the classroom goal structure, under which cooperative writing technique might be more successful.

Methodology

Participants

Based on convenience sampling procedure, three intact classes of Academic Writing course in three different branches of Islamic Azad University, Isfahan province, participated in this study. There were 90 junior students in those three classes. Their fields of study were Teaching English as a Foreign Language and Translation Studies, and their age ranged from 20 to 30 years old. The first language of all the participants was Persian. In an attempt to control the probable effects of previous knowledge, especially with respect to General English Proficiency (hereafter GEP), 83 students who were at intermediate level were selected for the study based on the results of Oxford Placement Test (hereafter OPT). They were assigned to one control and two experimental groups including 29, 27, and 27 learners respectively.

The other participants of the study were three university instructors and two raters. All three classes were taught by female non-native instructors of EFL with at least 10 years of experience whose age ranged from 39-41 years old. The raters who evaluated both samples of pretest and post-test as well as those essays written by the students during the treatment phase were two female professional EFL teachers who have taught academic writing course for at least 10 years.

Instruments and Materials

The instruments and materials applied in this study were: OPT (2001), the analytic writing assessment rubric developed by Hedgcock and Leftkowitz (1992), the instructional material, and two sets of 5-paragraph-essays written by students as pretest and post-test. OPT (2001) was utilized to ensure the homogeneity of the students in all three groups and to control the probable effects of GEP. The implemented writing rubric defines 5 components on a 0-100-point scale based on four specified levels (i.e. very poor, poor to fair, average to good, very good to excellent). The 5 components are Content (30 points), Organization (20 points), Grammar (25 points), Vocabulary (20 points), and Mechanics of writing (5 points). The instructional material for teaching essay writing was 'The Practical Writer with Readings' (Bailey & Powell, 2008). Finally, a sample of 83 essays for pretest was collected before the treatment. Another sample of 83 essays was gathered for post-test after a two week interval after the treatment. The topic of both pretest and post-test essays were success in the final exam.

Procedures

This quasi-experimental study, with a pretest, post-test design, was carried out in three parallel intact classes of Academic Writing course which is one of the requirements of BA program for students of TEFL and Translation Studies. The focus of the course was on essay writing and five essay types were taught including comparison-contrast, cause-effect, process, problem-solution, and finally classification. The instructional materials and teaching methodology of the content were the same for all three groups, but the classroom structures were differently set based on Ames (1992) classification of mastery and performance goal-orientation. All classes were taught by female non-native instructors of EFL with at least 10 years of experience.

First of all, OPT (2001) was administered to check for the general English proficiency of the students. It included 60 multiple-choice items on vocabulary, reading comprehension, and grammar. The results indicated that except for 7 students, all other participants were at intermediate level of GEP (i.e. scores 30-40). Since the study targeted intermediate EFL learners, those 7 students were excluded from data analysis but not the treatment because all of them had

enrolled to take part in the course. In the two experimental groups in which the writing tasks were performed cooperatively, the non-intermediate participants were placed in pseudo groups.

For pretest and post-test, the students in all three classes were asked to individually write a five-paragraph essay in 45 minutes, the topic of which was “success in the final exam”. They were not allowed to use dictionaries or any other resources. Pretest was carried out one week before the treatment and post-test was performed after a two-week interval.

The treatment lasted for five weeks in all three essay writing classes that met once a week for 90 minutes. Each session, students were asked to write a five-paragraph-essay of at least 250 words in 45 minutes after the teacher’s presentation of instructional content. More specifically, students in the control group did the writing task individually and they were informed of their grades privately. However, in the two experimental groups the participants were assigned to 9 subgroups including three members and the writing tasks were done cooperatively based on Turn Writing Model (Ritchie & Rigano, 2007) in which authors contributed different sections of a text which were then merged and harmonized. In other words, each group member was required to write a central paragraph individually, while the introduction and conclusion paragraphs were composed cooperatively. As such, the grades of each member of the group were different from the others based on the quality of the paragraphs written by him or her.

On the other hand, the classroom goal structures of the two experimental groups were not the same. The teacher of mastery-oriented experimental group was asked to consistently emphasize the value of cooperative learning, understanding the information presented in the classroom, and self-improvement. Also, the students were informed of their grades privately. However, the procedure was different for performance-oriented experimental group. There were competitions between groups to win the first, second, and third place in the class. The teacher was told to create performance goal structures in the classrooms by public notification of the highest achieving subgroups, using normative grading system, and giving extra points to subgroups that outperformed the others.

All five essays written by the students during the treatment phase of the study as well as the pretest and posttest samples were rated by two expert English teachers. To ensure the inter-rater reliability a sample of 10 essays, none of which were related to pre-test or post-test, were independently evaluated by the two raters. Then, all differences were discussed and resolved and a high level of agreement was reached. The inter-rater reliability for pre-test and post-test were established at .79 and .80 respectively.

Data analysis

Two series of one-way ANOVA tests were conducted to assess the performance of groups on pretest and also post-test that was followed by Scheffe post hoc analysis to indicate the exact place of differences. SPSS version 20 was used for statistical analyses.

Results

Before putting the data into statistical analysis, normality of data distribution and homogeneity of variances were investigated for pretest and post-test. The results of Kolmogorov-Smirnov test indicated that both pretest ($p=.070$) and post-test ($p=.089$) data were normally distributed at $p<.05$. Moreover, Levene’s test confirmed the homogeneity of variances of pretest ($p=.171$) and post-test ($p=.075$) at $p<.05$.

Table 1 illustrates the descriptive statistics for the three groups on pretest in terms of their writing proficiency scores in general and also such micro-aspects as content, organization, grammar, vocabulary, and mechanics of writing.

Table 1. Descriptive Statistics for Pretest

		N	M	SD	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Total score	Individual	29	73.29	3.650	.690	71.87	74.70	68	80
	cooperative mastery	27	74.85	2.395	.470	73.88	75.81	68	78
	cooperative performance	27	75.21	3.144	.584	74.01	76.40	70	82
Content	Individual	29	21.54	1.666	.315	20.89	22.18	20	25
	cooperative mastery	27	22.23	.992	.195	21.83	22.63	20	24
	cooperative performance	27	21.90	1.398	.260	21.36	22.43	20	24
Organization	Individual	29	14.86	1.297	.245	14.35	15.36	14	18
	cooperative mastery	27	15.19	.749	.147	14.89	15.49	14	17
	cooperative performance	27	15.45	.827	.154	15.13	15.76	14	17
Grammar	Individual	29	18.43	1.289	.244	17.93	18.93	17	21
	cooperative mastery	27	18.92	.845	.166	18.58	19.26	17	20
	cooperative performance	27	18.86	1.329	.247	18.36	19.37	17	22
Vocabulary	Individual	29	14.96	1.170	.221	14.51	15.42	13	17
	cooperative mastery	27	15.04	.916	.180	14.67	15.41	12	16
	cooperative performance	27	15.38	.820	.152	15.07	15.69	14	18
Mechanics	Individual	29	3.50	.638	.121	3.25	3.75	2	4
	cooperative mastery	27	3.46	.508	.100	3.26	3.67	3	4
	cooperative performance	27	3.62	.494	.092	3.43	3.81	3	4

Based on the rating scale developed by Hedgcock & Lefkowitz (1992), the total score of the pretest indicated that the three groups were at an average (average to good: 70-90) level of writing proficiency. A closer look at the scores for five aspects of writing proficiency including content (average to good: 21-26), organization (average to good: 14-17), grammar (average to good: 18-21), vocabulary (average to good: 14-17), and mechanics of writing (average to good: 3-4) confirmed that the participants were at the average level. The results of one-way ANOVA tests for pretest are presented in table 2.

Table 2. One-way ANOVA for Pretest

	Sum of Squares	df	Mean Square	F	Sig.
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Total score	Between Groups	58.649	2	29.324	3.008	.065
	Within Groups	779.858	80	9.748		
	Total	838.506	82			
Content	Between Groups	6.526	2	3.263	1.692	.191
	Within Groups	154.269	80	1.928		
	Total	160.795	82			
Organization	Between Groups	4.999	2	2.500	2.543	.085
	Within Groups	78.639	80	.983		
	Total	83.639	82			
Grammar	Between Groups	4.017	2	2.009	1.433	.245
	Within Groups	112.152	80	1.402		
	Total	116.169	82			
Vocabulary	Between Groups	2.789	2	1.394	1.453	.240
	Within Groups	76.753	80	.959		
	Total	79.542	82			
Mechanics	Between Groups	.386	2	.193	.635	.533
	Within Groups	24.289	80	.304		
	Total	24.675	82			

Based on Bonferroni adjustment formula, in order to prevent type one error, the alpha level of .05 was divided by the total number of dependent variables that was 6 which yielded an alpha level of .008. One-way ANOVA tests revealed no significant differences at $p < .008$ level in pretest scores of the three groups which indicated that the participant were at the same level of writing proficiency in pretest not only regarding the total score but also considering the five aspects of writing. Nevertheless, the groups were dissimilar in their post-test performance. The descriptive statistics are presented in tables 3.

Table 3. Descriptive Statistics for Post-test

		N	M	SD	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Total score	Individual	29	77.82	6.074	1.148	75.47	80.18	69	90
	cooperative mastery	27	79.58	3.580	.702	78.13	81.02	71	85
	cooperative performance	27	82.38	3.448	.640	81.07	83.69	77	90
Content	Individual	29	22.57	2.686	.508	21.53	23.61	19	27
	cooperative mastery	27	24.42	1.677	.329	23.75	25.10	20	27
	cooperative performance	27	25.00	1.363	.253	24.48	25.52	23	27
Organization	Individual	29	15.86	1.820	.344	15.15	16.56	13	19
	cooperative mastery	27	15.62	.804	.158	15.29	15.94	14	17
	cooperative	27	16.38	.903	.168	16.04	16.72	14	18

	performance								
Grammar	Individual	29	19.43	1.345	.254	18.91	19.95	17	22
	cooperative mastery	27	20.23	1.070	.210	19.80	20.66	18	22
	cooperative performance	27	20.62	1.147	.213	20.18	21.06	19	22
Vocabulary	Individual	29	16.03	1.133	.214	15.67	16.55	14	18
	cooperative mastery	27	15.35	.846	.166	15.00	15.69	13	17
	cooperative performance	27	16.11	.865	.161	15.71	16.36	15	18
Mechanics	Individual	29	4.00	.667	.126	3.74	4.26	3	5
	cooperative mastery	27	3.96	.196	.038	3.88	4.04	3	4
	cooperative performance	27	4.34	.484	.090	4.16	4.53	4	5

As it is shown in table 3, it seems that the performance-oriented group outperformed the other two classes not only in terms of macro level writing proficiency score but also regarding such micro level aspects of writing as content, organization, grammar, vocabulary, and mechanics. Table 4 shows the results of one-way ANOVA tests.

Table 4. ANOVA for Post-test

		Sum of Squares	df	Mean Square	F	Sig.
Total score	Between Groups	301.611	2	150.805	7.315	.001
	Within Groups	1649.281	80	20.616		
	Total	1950.892	82			
Content	Between Groups	90.797	2	45.398	11.450	.000
	Within Groups	317.203	80	3.965		
	Total	408.000	82			
Organization	Between Groups	8.482	2	4.241	2.642	.077
	Within Groups	128.410	80	1.605		
	Total	136.892	82			
Grammar	Between Groups	20.929	2	10.464	7.324	.001
	Within Groups	114.300	80	1.429		
	Total	135.229	82			
Vocabulary	Between Groups	9.435	2	4.718	5.133	.008
	Within Groups	73.529	80	.919		
	Total	82.964	82			
Mechanics	Between Groups	2.511	2	1.255	5.147	.008
	Within Groups	19.513	80	.244		
	Total	22.024	82			

One-way ANOVA tests revealed statistically significant differences between three groups at $p < .008$ level (i.e. adjusted alpha level) in post-test scores of macro level writing proficiency and such micro variables as content, and grammar. The effect size was calculated based on Cohen's Eta squared formula (1998, p.2) which yielded the following results for total score of writing proficiency = .15, content = .22, and grammar = .15. The figures indicated large effect

size. In order to have a more elaborated understanding of the findings, a series of post hoc Scheffe tests were carried out whose results are presented in table 5.

Table 5. Scheffe Post-hoc Analyses for Post-test

Dependent variables	(I) class goal structure	(J) class goal structure	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total score	Individual	mastery	-1.755	1.346	.400	-5.02	1.51
		performance	-4.558*	1.314	.003	-7.75	-1.37
	Mastery	individual	1.755	1.346	.400	-1.51	5.02
		performance	-2.802*	.950	.013	-5.09	-.51
	performance	individual	4.558*	1.314	.003	1.37	7.75
		mastery	2.802*	.950	.013	.51	5.09
Content	Individual	mastery	-1.852*	.605	.010	-3.32	-.39
		performance	-2.429*	.567	.000	-3.81	-1.05
	Mastery	individual	1.852*	.605	.010	.39	3.32
		performance	-.577	.415	.354	-1.58	.43
	performance	individual	2.429*	.567	.000	1.05	3.81
		mastery	.577	.415	.354	-.43	1.58
Organization	Individual	mastery	.242	.378	.800	-.68	1.16
		performance	-.522	.383	.369	-1.45	.41
	Mastery	individual	-.242	.378	.800	-1.16	.68
		performance	-.764*	.230	.005	-1.32	-.21
	performance	individual	.522	.383	.369	-.41	1.45
		mastery	.764*	.230	.005	.21	1.32
Grammar	Individual	mastery	-.802*	.330	.048	-1.60	-.01
		performance	-1.192*	.332	.002	-1.99	-.39
	Mastery	individual	.802*	.330	.048	.01	1.60
		performance	-.390	.299	.399	-1.11	.33
	performance	individual	1.192*	.332	.002	.39	1.99
		mastery	.390	.299	.399	-.33	1.11
Vocabulary	Individual	mastery	.761*	.271	.019	.11	1.42
		performance	.073	.268	.960	-.57	.72
	Mastery	individual	-.761*	.271	.019	-1.42	-.11
		performance	-.688*	.231	.012	-1.25	-.13
	performance	individual	-.073	.268	.960	-.72	.57
		mastery	.688*	.231	.012	.13	1.25
Mechanics	Individual	mastery	.038	.132	.954	-.29	.36
		performance	-.345	.155	.076	-.72	.03
	Mastery	individual	-.038	.132	.954	-.36	.29
		performance	-.383*	.098	.001	-.62	-.14
	performance	individual	.345	.155	.076	-.03	.72
		mastery	.383*	.098	.001	.14	.62

Considering the moderated alpha level of .008, macro-level writing proficiency of the performance group ($M=82.38$) was significantly different from individual ($M=77.82$) $p=.003$ group. Regarding the content essays, the Scheffe test indicated statistically significant differences between individually oriented class ($M=22.57$) and performance-oriented class ($M=25.00$), $p=.000$. The next aspect under the study was organization of essays. Although it was not considered to be a differentiating variable in the results of ANOVA test, the post hoc analysis illustrated a statistically significant difference between performance ($M=16.38$) and mastery ($M=15.62$) classes at $p=.005$. Another micro-variable subjected to Scheffe test was grammar. The individual class ($M=19.43$) was meaningfully different from performance-oriented one ($M=20.62$) at $p=.002$. However, post hoc analysis of vocabulary did not indicate any significant differences between groups at $p=.008$ which was in line with the results of ANOVA test. The last aspect of writing under the study was mechanics of writing. The only meaningful disparity was between mastery ($M=3.96$) and performance ($M=4.34$) groups at $p=.001$.

Discussion

The findings of this study showed that cooperative writing technique may not improve the academic writing proficiency of adult intermediate EFL learners without considering the appropriate classroom goal structure, since it was only the performance-oriented experimental group that outperformed the individual writing class in terms of the total score of writing proficiency as well as such micro-aspects as content and grammar. However, no significant differences were observed between mastery-oriented class and the individual one. On the other hand, the fact that post hoc analysis revealed meaningful disparities between performance and mastery groups regarding organization and mechanics of writing indicated that performance goal orientation could improve all aspects of writing except vocabulary. All in all, the findings revealed that different factors should be taken into account before starting to practice cooperative writing in an EFL class as the five aspects of writing may not benefit this technique equally. Moreover, classroom goal structure was observed to play an important role in the success of cooperative writing procedure.

Referring back to the importance of classroom conditions under which cooperative writing might be effective, and in a similar vein with the findings of Slavin (2014) and Gillies (2014, 2016), the results of this study showed that one of the influential classroom structures seems to be between-groups competition with extrinsic goal orientation. In other words, cooperative writing was observed to promote academic writing proficiency of adult Iranian intermediate EFL learners at tertiary education through performance goal orientation in structured small groups, where group members worked interdependently. So, all group members understood that they had to contribute effectively to achieve the group's shared goal, which was considered to be extrinsic as they competed with other small groups in the class to demonstrate their ability in an attempt to be better than others. In this regard, the results are in contrast with the findings of Anderman et al. (1998); Ryan and Ditrich (1997); and Wolters et al. (1996).

On the other hand, the findings are in contrast with Cury et al. (2006), Grant and Dweck (2003), and Harackiewicz et al., (2000) in that cooperative writing based on mastery goal orientation did not lead to a significantly different course achievement in comparison with the individual class. Moreover, the findings supported the results of Harackiewicz et al. (2002b) and Pintrich (2000a) in that performance goal orientation could be beneficial in competitive college setting for adult learners.

Last but not least, performance class overtook mastery group in terms of such micro aspects of writing as organization and mechanics of writing. These findings are in sharp contrast

with all those studies who pointed to the superiority of mastery goal orientation in terms of task achievement (Brookhart, et. al, 2006; Kaplan & Maeh, 1999). It should be noted that it was the analytical assessment rubric which could reveal such minor differences among the groups regarding the micro-aspects of writing proficiency; therefore, the researchers should be more cautious about overgeneralizations of the results for academic achievements.

Conclusion

The findings of this study, which pointed to the superiorities of performance-oriented classroom goal structure, between-groups competition, and extrinsic motivation, can help EFL teachers in setting a more effective classroom structure that supports students to achieve their shared instructional goals. In this regard, certain considerations should be taken into account such as grouping structure of students in the class as well as the model of cooperative task engagement, and also the assessment type.

This study is not free of limitations as it just focused on intermediate adult EFL learners and academic writing skill. In addition, the results may be affected by type of task and assessment rubric. Further studies can expand the focus of research on this topic by dealing with other variables such as heterogeneous grouping structure, and other language skills including listening, reading, or speaking; or the students' perceptions of classroom goal structure to investigate congruence of them.

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