

Instructional goal structure, gender and second language motivation affecting English language achievement

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Abstract

This study opted to 1) investigate a difference between cooperative and competitive learning modes in affecting English language achievement; 2) find gender, intra-gender and inter-gender differences in English language achievement within and across the three learning conditions and 3) study relationship between students' motivation to learn English language and English language achievement. An English language test was administered to 120 Arsi Negelle Shala Secondary School grade 9 students. The 12 items Mini-Attitude/Motivation test battery (Mini-AMTB) was administered to the students. Different parametric tests were used in the pre-test and post-test data analysis. Post-test analysis result revealed that cooperative learners significantly outperformed both competitive learners and control group, but the control group significantly outperformed competitive learners. Both groups of male and female students favoured cooperative learning mode; however, males favoured more. The aggregate measures of Mini-AMTB produced significant positive correlations with English language achievement, but language anxiety produced significant negative correlation.

Keywords: Cooperative learning, competitive learning, instructional goal structure, second language motivation.

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1. Introduction

Studies revealed that cooperative learning, compared with competitive and individualistic learning, culminates in highest student achievement (Johnson, Johnson, Johnson & Anderson 1976; Johnson, Maruyama, Johnson, Nelson & Skon, 1981; Van Oudenhoven, Van Berkum & Swen-Koopmans, 1987; Webb, 1982) and good pro-social behaviour, attitudes towards learning and higher-order reasoning. Student-centred thinking has spawned a burgeoning interest in the use of a variety of different active learning methods in and out of the classroom (Mascolo, 2009). Since years ago, student-centred teaching approach has been introduced in Ethiopian schools. The Institute for Curriculum Development and Research, Ministry of Education, has prepared new English language textbooks for high schools (Girma, 2003). Galgalo (1996, as cited in (Girma, 2003) stated that the course is more student-centred and communicative than its predecessors. Even though this teaching approach has already preferred by curriculum specialists and being used in schools, there are rumours about the effectiveness of the method. Some of these rumours criticise the method, whereas some of them blame teachers for its ineffectiveness. However, such rumours are not strongly supported by empirical studies.

In addition, Lopez Rua (2006) stated that, currently, language teaching methodologies emphasised communication and the learner; both of them are emphasised in several methods of language learning such as the communicative approach. The field of gender and foreign or second language education—of which the teaching and learning of foreign and second language vocabulary is a part—is a long-established one, having been a concern for many researchers and language teachers since the inception of the modern women’s movement (Schmitz 1975, as cited in Sunderland, 2010). Young & Oxford (1997, as cited in Tercanlioglu, 2004a; 2014b) stated that gender is an issue with important theoretical and pedagogical implications in second language learning; it received some attention in language learning strategy. They indicated that gender can have an important significance on how students learn a language. In addition, Erhman and Oxford (1989, as cited in Tercanlioglu, 2004a; 2014b) stated that a recent theory for gender difference states that although sometimes males dominated females in the use of particular methodology, females use more learning strategies or apply strategies more effectively. In Ethiopia context, the gender difference in English language achievement is inadequately researched. Gender differences in language achievement should be empirically researched in Ethiopian context in order to identify gender-related factors which can contribute to underachievement. Ehrlich, Pavlenko & Piller (2001, as cited in Schmenk, 2004) pointed out that critical views of the difference approach to understanding gender and language learning have emerged only recently. This author stated that difference approaches are inherently culture blind because they regard gender as a static, context-free category. Schmenk asserted studies stereotype language achievement as female’s domain and mathematics achievement as male’s domain.

The gender differences in English language achievement using similar learning mode in teaching and observing the learning mode, which is more favoured by males and females, are other points rose in this study. Previous studies on learning modes didn’t consider these issues. The researcher also suggests that this issue can help educators get information on how males and females learn.

Another variable which has got attention in research as affecting students’ foreign language achievement is second language motivation. Masgoret and Gardner (2003) pointed out that in the meta-analysis that explained 75 independent samples involving 10,489 individuals, the results clearly demonstrated that the correlations between achievement and motivation were uniformly higher than those between achievement and integrativeness, attitudes towards the learning situation and instrumental orientation. The socio-educational model (Gardner, 2004; Gardner and MacIntyre, in press, as cited in Gardner, 2005) has proposed that motivation and situational anxiety are important in second language learning.

In Ethiopia, although there is an absence of studies on second language motivation, one study conducted by Girma (2003) reported that students’ low motivation and poor proficiency in the English

language were identified as impediments to the implementation of group work in English language teaching classes. This finding is also contrary to the effect of cooperative learning on students' motivation to learn as many findings that witness cooperative learning as enhancing students' motivation towards a learning method and situation.

2. Statement of the problem

Contrary to the bulk of empirical findings that support the positive effects of cooperative learning on student achievement, the findings of the effectiveness of the method in Ethiopian schools are still controversial. The study by Girma (2003) revealed that the teachers' resistance to the new instructional procedure is most likely to be attributed to their lack of adequate training and skills necessary to devise and manage group work activities. Asmaru, Adane & Daniel (2006) stated that despite the strong criticisms on the conventional teacher-based approach in education, the teaching-learning process is, in most schools in Ethiopia, has persisted to be teacher dominated. Yalew (2004) reported that teachers' knowledge about the teaching method can have an influence on the application of the method in the classroom settings.

A typical group work activities associated with communicative language teaching are not equivalent to cooperative learning because the small group format is not the essence of cooperative learning. Although it is true that communicative group works (such as role play or problem-solving tasks) are prerequisite to cooperative learning and frequently embody certain cooperative learning principles, small cooperative learning activities in second language classes are not cooperative in nature or they underutilise cooperative learning principles (Siciliano, 2001). Because language is a key to educational success, underutilisation of the appropriate student-centred teaching methods can result in low language proficiency and this can be a factor for academic failures. Similarly, Ovando, Combs and Collier (2006, cited in Tong, Irby, Lara-Alecio, Yoom & Mathes, 2010) stated that for American bilingual English language learners, facilitating effective English acquisition is one solution to solve their problem of language learning. Therefore, conducting empirical studies on how to utilise the appropriate student-centred techniques and guidelines and ways to motivate teachers and the students towards the method is very important in Ethiopia.

Studies on gender differences in language achievement are inadequate in Ethiopia although it has got much attention in many studies in the world. Locally, in Ethiopian school context, it is important to identify whether or not this finding is consistent with the previous studies. This may help for dealing with the gender-related learning problems. Observing favourable learning modes for males and females is also the crucial issue in designing effective instructional methods.

Therefore, this study is primarily opted to 1) find the difference between the three learning conditions (cooperative learning, competitive learning and individualistic learning) in English language achievement; 2) observe gender difference in English language achievement; 3) find the correlations between aggregate measures of the mini-Attitude/Motivation Test Battery (mini-AMTB) and English language achievement; 4) identify gender differences in English language achievement within a group of students who learn using similar learning mode and 5) find the learning mode which is favourable for males and females.

In order to achieve the objectives of the study, the following research questions were posed: a) Do groups of students who learn using cooperative and competitive learning modes significantly differ in English language achievement? b) Is there a significant gender difference in English language achievement? c) Can a significant gender difference in English language achievement be observed within a group of students who learn using similar learning mode? d) Which learning mode is significantly favoured by males and females? e) Is there a significant correlation between the aggregate measures of the mini-AMTB and English language achievement?

3. Concepts

According to Johnson & Johnson (1985, as cited in Boling & Robinson, 1999), Cooperative learning is involving the use of small groups in instructional environments where students work together to maximise their own and other's learning. According to Johnson & Johnson (1974, as cited in Owens and Straton, 1980), goal structure or learning mode is the type of interdependence that exists among students and the ways in which the students will relate to each other and to the teacher in working towards the accomplishment of instructional goals. These researchers identified three different states of interdependence: 1. A cooperative goal structure exists when students can achieve their own individual goals only by working conjointly with others as they achieve their goals (e.g., large task accomplished by division of labour); 2. A competitive goal structure exists when students can achieve their own individual goals only when others fail to achieve their goals (e.g., coming first in a test or race) and 3. An individualistic goal structure exists when students can achieve their own individual goals no matter what others have chosen to do (e.g., completing an individually assigned library research assignment).

Deutsch (1949b, 1962, as cited in Johnson & Johnson, 1974), in building a theory of cooperation and competition, defined a competitive social situation as one where the goals of separate participants are so linked that there is a negative correlation between their attainments. Deutsch states, according to these researchers, in a competitive situation, the student seeks not only to succeed but also to cause other participants to fail; the student seeks on the outcome that is most beneficial to himself/herself and most detrimental to other students. He also defined an individualistic situation as one where the goals of the individuals are independent of each other; whether or not the individual accomplishes his goal has no bearing upon other individuals accomplish their goals. For this study, two theories are used as a theoretical framework: Marton Deutsch's cooperation and competition theory and socio-educational model of second language acquisition.

4. Research methodology

The true experimental and correlational research designs are used in this study. The pre-test post-test control group experimental design, using two treatment groups and one control group was applied. Arsi Negelle high school grade 9 students, the total population of the study, were 328 students: 167 male and 161 female. The sample size of this study was 120 students: 61 male and 59 female. The minimum age of students was 15 and the maximum was 18.

The probability sampling design with complex random sampling procedure accompanied by stratified sampling procedure was used. Once the researcher identified the number of males and females in each stratum, he allocated the sample size among strata using the following formula:

$$nk = [n/N]Nk$$

nk = the sample size for k th strata, Nk = total population of k th strata, N = total population size and n = the total sample size.

Once the researcher determined how many members should be taken from each stratum, he selected them using simple random sampling.

For the pilot study, the total sample of 34 students: 17 male and 17 female students were selected. After the pilot study, 180 students were selected and given the English language pre-test, papers marked and the students were categorised into high, medium and low achieving ability levels; 1.5 standard deviation below and above the mean was low and high achievers, respectively, and the rest were medium achievers. Then, the number of students should be included in the main study, sample size (120), was calculated and the students were randomly selected by lottery system from the three ability groups.

Table1. Assignment of participants to the three groups according to gender and ability level

Groups	Ability	Gender		Total
		Male	Female	
Cooperative Learning	H	5	5	10
	M	10	10	20
	L	5	5	10
	Total	20	20	40
Competitive Learning	H	5	5	10
	M	10	10	20
	L	5	5	10
	Total	20	20	40
Control Group	H	5	5	10
	M	11	9	20
	L	5	5	10
	Total	21	19	40

Note. H = high, M = medium, L = low

4.1. Instruments

There are two types of instruments used in this study: 43 items English language test and 12 items mini-AMTB. All English language test items were close-ended (multiple choice items) and were constructed by the researcher. The test was prepared from grade 9 English course (unit 1 up to 3), the course the students learned in the semester. The reason why the researcher constructed the test from what the students already learned is that in order not to make the treatment conducted at the same time with what the classroom teacher was teaching. The test consisted of reading, grammar, dialogue and punctuation mark items. At the beginning, 51 total items were constructed, marked and item analysis was made and 43 best items (eight reading skill, 26 grammar, five dialogue and four punctuation mark items) were selected.

The 12 items mini-AMTB, which is based on socio-educational model, was used to measure the participants' degree of motivation to learn the English language. The mini-AMTB is made up of 12 items that fall into six dimensions of motivational constructs: integrativeness (item 1 up to 3), attitude towards the learning situation (items 6 and 9), motivational intensity (items 4, 5 and 11), instrumental orientation (item 7), language anxiety (items 8 and 10) and parental encouragement (item 12). The mini-AMTB used a seven-point scale.

Both tests were administered in the presence of the researcher and the English language teachers of the school. Each of the English language tests had 1 point. Therefore, the highest score was to be 43. For the mini-AMTB, the maximum point of the scale was 84 points and the minimum point is 12. The high score for the five constructs, except language anxiety indicates a positive measure of the constructs; high score for language anxiety measures high anxiety.

The Cronbach's alpha internal consistency reliability analysis was conducted for both tests and sub-tests. Cronbach's Alpha reliability of English language subtests are reading (0.76), grammar (0.87), dialogue (0.65) and punctuation (0.70). The total English language test Cronbach's alpha reliability is 0.91. The Cronbach's alpha reliability for mini-AMTB sub-tests ranges from 0.68 (attitude towards the learning situation), 0.74 (integrativeness), 0.80 (motivational intensity), 0.90 (instrumental orientation), 0.93 (parental encouragement) and 0.93 (language anxiety).

The item discrimination power and Item Difficulty Index (Appendix A) for English language test were found in addition to item reliability. A point-biserial correlation was used to find the item discrimination power after entering the dichotomous data of the test into the SPSS program. Poor distracters chosen by few students were discarded and replaced. According to Varma (n.d),

problematic items will always show low point biserial correlations, but the accompanying p -value may be low or high. The point biserial correlation should be used to assess item quality; p -values should be used to assess item difficulty. In this study, the researcher used point biserial correlation to select quality English language test items for this study. A point biserial value of 0.15 is recommended although experience shows that good items have point biserials above 0.25 (Varma, n.d). In the English language test, except item number 22 (which has point biserial 0.18), all items were above 0.25 point biserial.

The SPSS version 20 used for data analysis; one-way Analysis of variance (ANOVA), two-way ANOVA, one-way Analysis of covariance (ANCOVA), dependent samples t -tests and Pearson Moment correlation were used.

4.2. Teaching materials

The teaching materials used in this study were grade 9 English textbook, plasma teacher guide and numbered cards.

4.3. Teaching procedures

4.3.1. Teams-games-tournament

In cooperative learning condition, students were grouped into 10 groups of four students: one high achiever, two medium achievers and one low achiever. After grouping was completed, the students were told that they were playing academic games and each student had to earn points to his/her group and at the end of the tournament, the winning teams would be awarded. In general, every orientation was given on how to work in groups during the study at the beginning.

Then, the students were taught according to the curriculum in the classroom and each team of students was told to study together, practice and quiz each other after every researcher's teachings of the lessons in the class. The researcher highly awarded those groups which performed highly in the tournament. He said, 'Supergroups will win the cup at the end of the day'. Contests were continued being held once a week for 1 month. At each tournament, there were three tables of homogeneous ability groups, two tables consisting three students each, whereas one table consisting four students. At one tournament day, 10 homogeneous ability students participated in the tournament.

4.3.2. Competitive teaching mode

In this learning condition, the students were taught according to the curriculum but the researcher used competitive teaching mode—rewarding those students who were highly performing in the class, and giving less attention to low achievers. The researcher said at the beginning of the class, 'Early birds will be awarded in this class'. At the end of each week, a test was given to this class and top 10 high scoring students were announced.

Control group: In this learning condition, the students were taught according to the curriculum. The class was given the same test as that was given to the competitive learning condition. However, in this condition, the students were not rewarded according to their performance in the class and in the test. The researcher only told them their test results and continued teaching.

4.4. Ethical considerations

In this study, to keep the instructional ethics, the researcher: 1) informed the school administrators, teachers and students the purpose of the study, the time it takes and what would be done throughout the study and came to the consensus and 2) refrained from saying destructive words in the class.

5. Results, findings and discussion

5.1. The relation of instructional goal structures and gender with students' English language achievement

5.1.1. Pre-test analysis

The pre-test ANCOVA, using the aggregate measures of the mini-AMTB as a covariate, shows that there was no significant difference between the instructional goal structure groups (cooperative learning, competitive learning and control group) on English language achievement, $F(2,108) = 0.51$, $p > 0.05$. Similarly, the gender difference on English language achievement was not significant, $F(1,108) = 1.30$, $p > 0.05$. Therefore, we can see from the pre-test analysis that the difference has been controlled and we can reasonably expect that the difference that can occur in the post-test analysis can be due to treatment effect.

The dependent samples pair-wise t -test was conducted on pre-test data to analyse the gender deference in English language achievement in a learning condition and the result is presented as follows: 1) the dependent samples t -test for pre-test data analysis showed that the difference between males ($M = 22.60$, $SD = 8.75$) and females ($M = 23.45$, $SD = 8.49$) in cooperative learning group in English language achievement was not significant, $t(19) = 0.31$, $p > 0.05$, two tailed; 2) the dependent samples t -test for pre-test data analysis also indicated that the difference between males ($M = 22.15$, $SD = SD = 8.52$) and females ($M = 20.75$, $SD = 8.64$) in competitive learning group was not significant, $t(19) = -0.47$, $p > 0.05$, two tailed; 3) similarly, the pre-test dependent samples t -test analysis revealed that the difference between males ($M = 21.37$, $SD = 8.43$) and females ($M = 23.16$, $SD = 8.78$) in control group condition in English language achievement was not significant, $t(18) = 0.82$, $p > 0.05$, two tailed.

To test the inter-gender difference in English language achievement in three learning conditions, the one way ANOVA was conducted and the results were described as follows: 1) the one way ANOVA analysis for pre-test data revealed that the difference between a group of males in the three learning conditions in English language achievement was not significant, $F(2,58) = 0.02$, $p > 0.05$. 2). The pre-test one way ANOVA analysis for a difference between a group of females in the three learning groups in English language achievement was not significant, $F(2,56) = 0.21$, $p > 0.05$.

5.1.2. The post-test analysis

The post-test two-way ANOVA showed that the difference between instructional goal structure groups in students' English language achievement was significant, $F(2,114) = 9.23$, $p < 0.05$. However, the gender difference on English language achievement was not significant, $F(1,114) = 0.03$, $p > 0.05$. From the post-hoc pair-wise comparison of Least Significant Difference analysis, we can see that cooperative learning group ($M = 32.45$, $SD = 7.18$) significantly outperformed both competitive learning group ($M = 25.00$, $SD = 8.60$) and control group ($M = 26.53$, $SD = 8.42$). There is no significant difference between competitive learning group and control group on English language achievement.

The ANCOVA, when the pre-test English language score was used as a covariate to adjust the difference in English language achievement before treatment, showed that the difference between the three groups on English language achievement was significant, $F(2,113) = 166.70$, $p < 0.05$, similar to the previous post-test ANOVA analysis result. However, the gender difference was not significant again in the post-test ANCOVA, $F(1,113) = 0.19$, $p > 0.05$. From post-hoc pair-wise comparison of the Least Significant Difference analysis, we can see that cooperative learning group ($M = 32.45$, $SD = 7.18$) significantly outperformed both competitive learning group ($M = 25.00$, $SD = 8.60$) and control group ($M = 26.53$, $SD = 8.42$). Mean difference was significant at 0.05 levels. However, the control group was significantly outperformed competitive group in this analysis.

Table 2. Summary of descriptive statistics for pre-test and post-test data

Dependent Measure	sex	Cooperative Learning				Competitive Learning				Control Group			
		M	SD	N	T	M	SD	N	t	M	SD	N	t
Pre-test	M	22.60	8.75	20	0.31	22.15	8.52	20	-0.47	22.24	8.53	21	0.82
	F	23.40	8.46	20		21.75	8.86	20		23.16	8.78	19	
	Total	23.00	8.50	40		21.96	8.58	40		22.67	8.48	40	
Post-test	M	32.20	7.56	20	0.21	25.50	8.36	20	-0.28	25.90	8.32	21	1.02
	F	32.70	6.96	20		24.50	9.01	20		27.21	8.70	19	
	Total	32.45	7.18	40		25.00	8.60	40		26.53	8.42	40	

* $p < 0.05$

Note: N refers to the number of males or females in a learning condition.

The dependent samples pair wise *t*-test was conducted on post-test data to analyse the gender deference as a result of the treatment effect in English language achievement in a learning condition and the result was presented as follows: 1) the pair wise dependent samples *t*-test for post-test data analysis showed that the difference between males ($M = 32.20$, $SD = 7.56$, $n = 20$) and females ($M = 32.70$, $SD = 6.96$, $n = 20$) in cooperative learning group in English language achievement as a result of the treatment effect was not significant, $t(19) = 0.21$, $p > 0.05$, two tailed; 2) pair wise *t*-test for post-test data analysis also indicated that the difference between males ($M = 25.50$, $SD = 8.36$, $n = 20$) and females ($M = 24.75$, $SD = 8.86$, $n = 20$) in competitive learning group as a result of the treatment effect was not significant, $t(19) = -0.28$, $p > 0.05$, two tailed; and 3) the post-test pair wise *t*-test analysis revealed that the difference between males ($M = 25.05$, $SD = 8.24$, $n = 19$) and females ($M = 27.21$, $SD = 8.70$, $n = 19$) in control group condition in English language achievement was not significant, $t(18) = 1.02$, $p > 0.05$, two tailed.

To test the inter-gender difference in English language achievement as a result of the treatment effect in three learning conditions, the one-way ANOVA post-test analysis was conducted and the results were described as follows: 1) the one-way ANOVA analysis for post-test data revealed that the difference between a group of females in the three learning conditions in English language achievement as a result of the treatment effect was significant, $F(2.56) = 5.11$, $p < 0.05$. The post-hoc Tukey HSD pairwise comparison showed that females in cooperative learning group ($M = 32.70$, $SD = 6.76$, $n = 20$) significantly outperformed females in competitive learning group ($M = 24.50$, $SD = 9.01$, $n = 20$), showing no significant difference with females in control group condition ($M = 27.21$, $SD = 8.70$, $n = 19$). The difference between female competitive learners and a group of females in control group condition was also not significant. 2) The post-test one-way ANOVA analysis for difference between a group of males in the three learning groups in English language achievement as a result of the treatment effect revealed that the difference was significant, $F(2.58) = 4.34$, $p < 0.05$. The Tukey HSD post-hoc pair-wise comparison showed that males in cooperative learning group ($M = 32.20$, $SD = 7.56$, $n = 20$) significantly outperformed both males in competitive learning group ($M = 25.50$, $SD = 8.36$, $n = 20$) and males in control group ($M = 25.90$, $SD = 8.32$, $n = 21$). On the other hand, the difference between males in competitive learning group and males in control group was not significant.

5.2. The relationship between students' English language learning motivation and English language achievement

In this part, the correlation between aggregate measures of Mini-AMTB and English language achievement was analysed.

Table 3. Correlations between the aggregate measures of mini-AMTB and English language achievement: N = 120

	1	2	3	4	5	6	7
INT	-	0.70**	0.61**	0.35**	-0.60**	0.47**	0.77**
MI		-	0.85**	0.44**	-0.67**	0.50**	0.83**
ALS			-	0.48**	-0.59**	0.45**	0.77**
IO				-	-0.38**	0.29**	0.56**
LA					-	-0.49**	-0.77**
PE						-	0.57**
Pre-test Score							-

** $p < 0.01$, two-tailed

Note: INT: Integrativeness, MI: Motivational Intensity, ALS: Attitudes towards the Learning Situation, IO: Instrumental Orientation, LA: language anxiety, PE: Parental Encouragement

The analysis illustrated that all of the correlations between aggregate measures of mini-AMTB and English language achievement were significant at 0.01 levels. The correlation for the five constructs of mini-AMTB [i.e., integrativeness, $r(118) = 0.77, p < 0.01$; motivational intensity, $r(118) = 0.83, p < 0.01$; attitudes towards the learning situation, $r(118) = 0.76, p < 0.01$; instrumental orientation, $r(118) = 0.56, p < 0.01$; and parental encouragement, $r(118) = 0.57, p < 0.01$] are positive, but the correlation is negative for language anxiety, $r(118) = -0.77, p < 0.01$. The highest positive correlation was observed at the motivational intensity and the lowest positive correlation was observed at instrumental orientation.

6. Discussion

Consistent with previous studies, the cooperative learning group significantly outperformed both competitive learning group and control group in this study. The finding is consistent with Johnson, Johnson and Stanne (2000) who found that the eight cooperative learning methods had a significant impact on student achievement compared with the competitive learning method.

The finding of this study showed that the absence of gender difference in English language achievement, contrary to the previous studies (Lopez Rua, 2006; Schmenk, 2004; Tong et al., 2010). This study showed the absence of gender differences in English language achievement in three learning conditions separately. This finding also gives additional implication for instructional improvement because it gives some information about how males and females learn the language. Although few studies have been conducted in this area, Johnson and Johnson (1985, as cited in Gillies and Ashman, 1995) stated that high-medium and low-ability students all benefited academically from participating in gender balanced, mixed-ability cooperative learning groups. In addition, these researchers pointed out that students in all conditions benefited from cooperative group experience.

‘Which learning mode is significantly favoured by males and females?’ was one of the research questions in this study. When females were compared, the result revealed the presence of differences between groups of females in the three learning conditions. A group of females in cooperative learning condition significantly outperformed a group of females in competitive learning condition, showing no significant difference with the group of females in control group. The comparison didn’t show a significant difference in English language achievement between a group of females in competitive learning condition and a group of females in control group. In the case of males, a group of males in cooperative learning condition significantly outperformed both a group of males in competitive learning condition and a group of males in control group condition, showing no significant difference between control group males and competitive group males. This finding revealed that the difference in language achievement between groups of students of the same sex occurred as a result of the learning mode differences. In addition, this intra-gender and inter-gender language

achievement illustrated that the difference in English language did not occur as a result of the gender difference but it occurred as a result of the learning mode differences; in case of intra-gender comparison, no difference was observed, but in case of inter-gender comparison, the difference between groups of students of the same sex across the three learning conditions was significant.

As we can see from this finding, the cooperative learning mode is more favoured by both males and females than competitive learning mode. Cooperative learning mode is more favoured by males than females because a group of males in cooperative learning group outperformed both a group of males in competitive learning group and control group, while a group of females in cooperative learning condition outperformed only a group of females in competitive learning condition. Amid shortage of studies, Gillies and Ashman (1995) also stated that students in all conditions benefited from cooperative group experience.

The correlations for five constructs of the mini-AMTB were positive and significant. However, the correlation for language anxiety was negative and significant. This finding is similar to the previous findings. For instance, a study conducted by Gardner (2005) in four European countries (Croatia, Poland, Romania and Spain) found the positive correlations with these five constructs of the AMTB and student grades, and negative correlation with one construct (language anxiety) in most cases.

7. Conclusions and implications

7.1. Conclusion

Depending on the findings of the study, the following conclusions are made: 1) cooperative learning mode when it is applied in English language learning with its effective cooperative learning technique can result in highest student English language achievement than competitive learning mode; 2) the significant gender difference in English language achievement was not supported by the findings of this study when we compare males and females after teaching in the classes of mixed-ability composition and gender composition using cooperative and competitive learning modes; 3) the significant difference in English language achievement between males and females within a group of students was not supported by the findings of this study when we compare them after teaching using either cooperative learning mode or competitive learning mode; 4) cooperative learning mode is more effective both for males and females, it is more effective for males however; and 5) there is a significant positive correlation between the five motivational constructs of the mini-AMTB and English language achievement, but the correlation is negative and significant for language anxiety.

7.2. Implication

The findings of this study have new contributions and inputs to the language curriculum. Theoretically, when high language performance based on the use of student-centred approach is desired, utilisation of all cooperative learning principles in using student-centred approach by using effective cooperative learning techniques (e.g., TGT) is to be preferred over competitive instruction.

The second new input of this finding is the importance of gender in language learning. This is important to the curriculum because gender-related differences in language learning should be thoroughly researched in Ethiopian school context for many reasons: 1) to observe Ethiopian females competence in language learning compared with those of all over the world; 2) to identify gender-related language learning problems and give supportive and remedial measures in teaching and 3) to assist in designing non gender-biased curriculum. In addition, this finding contributes new input to the curriculum by pointing out the learning mode which favoured by the majority of students regardless of gender difference. Finally, because learning and motivation are inseparable variables, the findings of this study encourage teachers to seek ways of triggering motivation towards second language learning.

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Appendix

Appendix A. Point Biserial and *p*-Values of English Language Test

Reading								
Items	It1	It2	It3	It4	It5	It6	It7	It8
Point-biserial	0.47	0.25	0.52	0.25	0.44	0.68	0.51	0.57
<i>p</i> -values	0.62	0.59	0.38	0.35	0.35	0.29	0.21	0.35

Grammar																
Item	It9	It10	It11	It12	It13	It14	It15	It16	It17	It18	It19	It20	It21	It22	It23	It24
Point-biserial	0.43	0.45	0.36	0.34	0.47	0.29	0.37	0.49	0.28	0.58	0.48	0.26	0.36	0.18	0.54	0.37
<i>p</i> -value	0.59	0.65	0.74	0.62	0.65	0.35	0.35	0.18	0.62	0.47	0.35	0.29	0.24	0.41	0.53	0.35

Item	It25	It26	It27	It28	It29	It30	It31	It32	It33	It34
Point-biserial	0.46	0.45	0.63	0.57	0.36	0.32	0.24	0.67	0.28	0.57
<i>p</i> -value	0.44	0.26	0.45	0.45	0.58	0.81	0.71	0.29	0.74	0.35

Dialogue					Punctuation				
Item	It35	It36	It37	It38	It39	It40	It41	It42	It43
Point-biserial	0.41	0.39	0.36	0.63	0.27	0.49	0.49	0.50	0.47
<i>p</i> -value	0.52	0.68	0.52	0.42	0.61	0.52	0.58	0.65	0.45

Appendix B. Summary of the Tournament Procedure

week	student	Table	Practice team No.	Ability level	No. of questions	No. of cards		Points	
						Won	Lost		
1	1	1	5	High	2	3	0	6	
			7	High	2	1	1	2	
			2	High	2	2	0	4	
	2	2	4	High	2	3	0	6	
			10	High	2	2	0	4	
			3	High	2	1	1	2	
			6	High	2	2	0	4	
	2	3	3	6	High	2	2	0	4
				9	High	2	2	0	4
				1	High	2	3	0	6
8				High	2	1	1	2	
11				Low	2	1	1	2	
12				Low	2	2	0	4	
13				Low	2	3	0	6	
2	5	5	10	Low	2	4	0	6	

	15		6	Low	2	1	1	4
	16		3	Low	2	1	1	4
	17	6	4	Low	2	0	2	2
	18	6	7	Low	2	1	1	2
	19		2	Low	2	2	0	4
	20		9	Low	2	4	0	6
3	21	7	7	Medium	2	1	1	4
	22		3	Medium	2	0	2	2
	23		1	Medium	2	3	0	6
	24	8	9	Medium	2	2	0	4
	25		4	Medium	2	1	1	2
	26		8	Medium	2	3	0	6
	27	9	6	Medium	2	0	2	2
	28	9	10	Medium	2	2	0	4
	29		2	Medium	2	1	1	2
	30		5	Medium	2	4	0	6
4	31	10	2	Medium	2	3	0	6
	32		7	Medium	2	1	1	2
	33		4	Medium	2	2	0	4
	34	11	1	Medium	2	2	1	4
	35		9	Medium	2	0	2	2
	36		5	Medium	2	3	0	6
	37	12	6	Medium	2	2	0	4
	38		3	Medium	2	1	1	2
	39		10	Medium	2	4	0	6
	40		8	Medium	2	1	1	2

Appendix C. Rank of Practice Group According to the Total Scores Earned by All Group Members

<u>Practice Team group No.</u>	<u>Total points</u>
1	22
5	20
10	20
9	16
2	16
6	14
8	14
4	14
3	10
7	10