# Filipino ESL Learners' Attitudes Toward Cooperative Learning and Their Relationship to Reading Comprehension

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# Abstract

Departing from Gonzales and Torres' (2015) quantitative quasi-experimental study on the effectiveness of cooperative learning (CL) on Grade 8 students in a private school in Manila, the present study attempts to uncover possible findings in the affective dimension through a 25-item survey questionnaire that quantitatively gauges the Grade 8 Filipino ESL learners' attitudes towards CL. The effectiveness of the approach was further assessed by correlating the attitudes with reading comprehension test scores in Gonzales and Torres' (2015) study. Adopting both quantitative and qualitative approaches, it was discovered that, despite certain reservations, the Grade 8 learners had positive attitudes towards CL. In addition, findings indicate a very weak positive relationship between learner CL attitudes and reading comprehension. The current study has implications not only limited to Philippine ESL classrooms, but also to ESL classrooms around the world.

Keywords: attitude, reading comprehension, cooperative learning, correlation, Filipino, ESL

## Introduction

Relatively recently, the image of a good teacher is associated with the ability to facilitate learning instead of merely lecturing, manifested by the emergence of literature related to cooperation and group work. In some way, being able to employ cooperative learning approaches in the classroom then perceptibly indicates a teacher's effectiveness in the classroom as a result of increased student performance (Gonzales & Torres, 2015). However, whether or not the learners' view of cooperative learning affects their performance after the cooperative learning activities still remains a question at least in certain ESL contexts. This paper attempts to answer this question in the Philippine context. Before we present our study, we will review the literature on cooperative learning and reading comprehension.

## **Cooperative Learning**

Cooperative learning (CL)is based on Wittrock's *Generative Learning Theory* and Vygotsky's notion of the *Zone of Proximal Development* (Gonzales & Torres, 2015; McLeish, 2009; Pan & Wu, 2013). It requires students to work together and help each other in achieving specific and attainable learning goals. It is more than just simply grouping the students and assigning them tasks (Macpherson, 2015). Instead, it requires the cooperation of students as well as their dependence on each other in relation to classroom goals, tasks, and reward structures (Miller & Peterson, 2002).

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CL comes in many forms. Kluge (1999) identified five of the most common models of CL: (1) *The Structural Approach*, which is based on the use of various distinct sequences of classroom behaviors; (2) *Group Investigation*, which incorporates four basic features: investigation, interaction, interpretation, and intrinsic motivation; (3) *Student Team Investigation*, where students work together towards a common goal and to structure interdependence; (4) *Curriculum Packages*, which involve sets of cooperative learning material that are usually specific to a subject and age level, and (5) *Learning Together*, which basically emphasizes the teaching and practicing of the social skills required to work together. These models are distinct on their own as they have unique qualities and different learning goals. However, these models do have common elements that identify them under CL. These elements a re *positive interdependence*, where the learner's success is dependent on other learners' successes; *individual accountability*, where each team member is accountable and responsible for their contributions; *promotive interaction*, where each team member is accountable and responsible for their contributions; *promotive interaction*, where each team member is encouraged to interact through problem-solving, supporting, and encouraging one another; *interpersonal skills*, where learners have opportunities to communicate ideas and express them to the group, and lastly, *group processing*, where learners develop their group dynamics (Johnson, Johnson, & Smith, 1998) (see Figure 1).

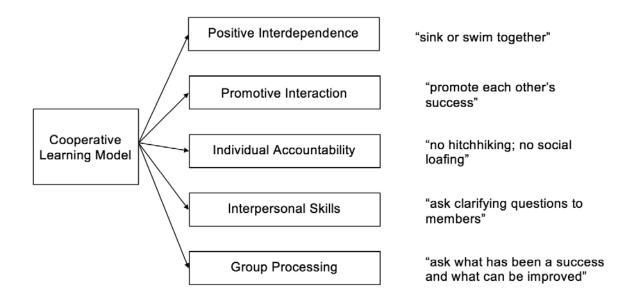


Figure 1. Johnson, Johnson, and Smith's (1998) Five Elements of Cooperative Learning (Neo et al., 2012)

## **Cooperative Learning and Reading Comprehension**

Several studies have highlighted the relationship between CL and reading comprehension. In Bolukbas, Keskin, and Polat's (2011) study, a significant improvement in reading comprehension was observed in a Turkish class of 40 learners who were taught using the *Ask Together - Learn Together* technique. In the EFL setting, Jalilifar (2010) and Zarei and Keshavarz's (2011) studies both involved Iranian EFL students; however, Jalilifar's (2010) study focused on increasing reading comprehension through *Student Team Achievement Divisions* (STAD) and GI while Zarei and Keshavarz's (2011) study focused on the STAD and *Cooperative Integrated Reading and Composition* (CIRC) techniques in CL. Both studies underscored the importance of CL, as reading comprehension scores improved significantly from the control groups. In a study by Wichadee (2005), Thai EFL students were taught using the STAD technique and also had significantly higher reading comprehension scores than those in the control group.

Pan and Wu's (2013) study, on the other hand, focused on the effects of reciprocal CL instruction on the reading comprehension of 79 Taiwanese EFL students.

Moreover, Gonzales and Torres' (2015) mixed-method quasi-experimental research study, which forms the foundation of this investigation, focused on the effects of CL on the reading comprehension of 127 Grade 8 Filipino ESL students. Despite insignificant improvement in general, the results of their study showed that after the students were exposed to CL, improvement in higher-order thinking skills, particularly the evaluate sub-skill that involves one to distinguish fact from opinion, was significant since it provided avenues for explanation, logical inference, debates, etc.

# Learners' Attitudes Toward Cooperative Learning

Among the studies examining the attitudes of learners toward CL, most generally shared the same findings that learners exhibited positive attitudes toward learning with their peers. Farzaneh and Nejadansari's (2014) study conducted with Iranian EFL students revealed that participants generally held a positive view of CL because they were able to feel that they could depend on each other, which increases confidence to solve problems and the enjoyment of learning. A similar positive outlook towards CL can be seen in Er and Aksu Ataç's (2014) study involving Turkish students, which revealed that 66.9% of them are skewed towards CL while 31.1% preferred to work alone. Pakistani students in Akhtar et al.'s (2012) study shows similar results when it comes to learning in groups rather than individually. They also believed that CL enhances learning and socialization while not compromising enjoyment.

In the Southeast Asian context, one notable study regarding learner attitudes toward CL is Tuan's (2010), which found that the reason Vietnamese learners favored CL was because it improved their understanding of the topic. In the Philippine context, some studies (Schmidt & Watanabe, 2001; Valdez, Lomoljo, Dumrang, & Didatar, 2015) also show similar results to the aforementioned study. Valdez et al. (2015) discovered that Filipino learners preferred lessons utilizing the cooperative approach because they became more engaged in their learning and were more independent when it comes to pace and participation. Moreover, their study revealed that CL methods motivated learners to become critical thinkers and helped them to connect individual fragmented ideas. This was affirmed by Schmidt and Watanabe's (2001) study, which showed that Filipino learners approve of innovative approaches like the cooperative approach and scored the highest on a CL scale administered to five other ethnic groups. Based on the same study, it should also be noted that these Filipinos use social learning strategies more often than learners of other languages.

Although most of the learners had a positive outlook towards CL, some had certain reservations towards working collaboratively. McLeish's (2009) study conducted with Jamaican students showed that 50% of the respondents were uncomfortable in CL classes. The study pointed out that learners may prefer to work on their own rather than within a group due to the fear of low grades and conflicts of interest. Despite the reservations of some learners towards CL, it can be said that most learners around the world generally favor CL because it enhances learning, hones social skills, and increases engagement within the group (Farzaneh & Nejadansari, 2014).

#### Effect of CL Attitudes on Reading Comprehension

According to Ajzen and Fishbein's (1980) *Theory of Reasoned Action*, one factor of learner performance is attitude. Based on this theory, the act of believing that one can perform a task can result in a positive outcome. In other words, a positive attitude can result in better performance because once attitude is formed, it can shape the way learners think, feel, understand, and behave. So, for example, if learners believe that CL will have a significant effect on reading comprehension, then it will be to their benefit. Burns, Roe, and Ross (1999) and Downing (1982) support this theory by underscoring the importance of the affective aspect in reading achievement.

Some researchers have already explored CL as a methodology for motivation (Farzaneh & Nejadansari, 2014). There are also some studies that show how CL pedagogies can increase reading comprehension (Gonzales & Torres, 2015); however, it seems that there are only a limited number of published studies that demonstrate the

direct relationship of CL attitudes to learners' reading comprehension, especially in the Philippine context. Ghaith and Bouzeineddine's (2003) study showed that while learners with positive attitudes towards reading comprehend texts better, the learners' attitudes towards CL have no relation to reading achievement.

#### **Research Questions**

The literature review signals the need for a study that investigates the attitudes of learners towards CL in the Philippine classroom is evident. A study that directly links learners' attitudes towards CL to reading comprehension could also contribute to English language classrooms in general.

Typically, English teachers in the Philippines, as well as some Southeast Asian countries, may tend to have problems such as a lack of resources, a scarcity of quality teaching strategies, time deficiencies, and possibly an unfamiliarity with authentic assessment (Gonzales & Flores, 2016), which may impede the utilization of learnercentered approaches, which includes CL. Although there are signs of Filipino learners being receptive towards CL, some teachers still use traditional (e.g., teacher centered methods), for example, in literature classes (Gonzales & Flores, 2016; Valdez et al, 2015). By providing teachers with insights regarding the attitudes of students towards CL and its relationship to reading comprehension, this study may encourage them to consider using CL and other related approaches for the long run. This type of research can provide teachers with theory-backed options and strategies for teaching reading and the English language in general. Departing from Gonzales and Torres' (2015) study, the researchers would like to answer the following questions:

- 1. What are learners' attitudes towards cooperative learning?
- 2. What is the relationship between the identified cooperative learning attitudes and reading comprehension?

#### **Participants**

This study's 68 respondents were selected through purposive sampling of Grade 8 students from Holy Spirit School (pseudonym).<sup>1</sup> The respondents were from two sections: one with 36 students and another with 32. Thirty-four of them were male (50.00%) and 34 were female (50.00%) — with ages ranging between 12-15 years old. All the respondents were enrolled in English classes that focus on language and Afro-Asian literature for 50 minutes a day; all respondents gave their permission for the researchers to analyze their responses (Appendix 3).

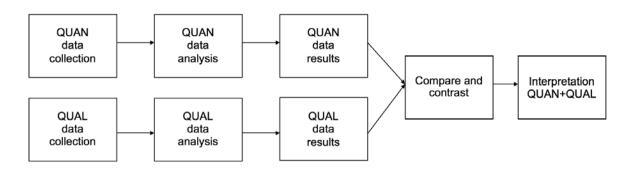


Figure 2. Convergence Model (Creswell & Plano Clark, 2011)

#### Method

# **Research Design**

The researchers adopted a descriptive mixed approach design for their study. Creswell and Plano Clark's (2011) *Convergence Model* was used, its primary feature is the convergence of both quantitative and qualitative data (see Figure 2). The model was used to address the research questions as well as to give a more accurate and reliable picture of the results. Qualitative data for this study comes from the interviews while quantitative data was compiled from the survey results.

## Instruments

To answer the research questions, the researchers primarily utilized the following instruments: (1) interview protocol and (2) survey questionnaire.

The *interview protocol* generally aimed to elicit oral responses from learners exposed to the CL approach. Specifically, the interviews with students aimed to assess learners with regard to their impressions as well as preferences for pedagogy, group size, and suitability of the CL approach. One student for each class was randomly chosen for the interview, which had eight questions. The researchers composed the majority of the questions based on McLeish's (2009) study.

The 25-item *survey questionnaire*, adapted from Neo et al. (2012) was divided into five sections, each section pertaining to one of the five core principles of CL: (1) positive interdependence, (2) individual and group accountability, (3) face-to-face promotive interaction, (4) interpersonal skills, and (5) group processing (see Appendix 1). Under each section, there are five items that are related to the principle. This instrument was used to assess the attitudes of learners towards the CL-based CIRC activities and adopted a *4-point Likert scale* to quantify the data. The respondents answered the survey by placing a check mark on the box that corresponded to their answers for each item. The options were as follows: strongly disagree (SD), 1 point; disagree (D), 2 points; agree (A), 3 points; and strongly agree (SA), 4 points. According to George and Mallery (2003), this 25-item survey questionnaire has a reported Cronbach's Alpha reliability coefficient of 0.932, which means that the survey has excellent reliability. The survey questionnaire was administered to 68 Grade 8 students.

Reading Comprehension Tests made by Gonzales and Torres (2015) were administered to the students before this study; they were tested for validity with the help of experienced teachers and have also been tested for reliability. Each test had fifteen items and focused on a certain literary text (e.g., The Pheasant's Bell, etc.) that is to be answered within 12 minutes. The items in the test were constructed to test the following comprehension subskills: (a) recalling details, (b) summarizing, (c) identifying the main idea, (d) making inferences, and (e) determining fact versus opinion (Gonzales & Torres, 2015).

#### Procedure

- 1. The students read the reading selection for 30 minutes, after which it was collected by the researchers.
- 2. The students then answered the reading comprehension test within 12 minutes. How the scores are computed are detailed in Gonzales and Torres' (2015) study.
- 3. The researchers distributed the 25-item survey questionnaire to the students after two sessions, with each session lasting an hour, conducted with CL; students were given 20 minutes to complete the questionnaire. It should be noted that permission forms were signed by the students before they answered the questionnaire.
- 4. The researchers collected the 25-item survey questionnaire. During their recess period/break time, the researchers **r**andomly chose one student from each Grade 8 class for a short interview due to time limitations.

#### **Analytical Procedure**

Descriptive statistics (mean, standard deviation, frequency, and frequency percentage) was utilized for the quantitative data, particularly data from the survey questionnaire and the comprehension tests. The scores for the reading comprehension test were gathered from the number of correct items for each test while the scores for the

survey were collected from the Likert-scale-based points. The researchers manually encoded the individual scores onto an Excel spreadsheet, after which, the mean and other quantitative statistics were obtained using the same software. Manifest-level content analysis was utilized by the researchers for the qualitative data, particularly the interviews, to determine the attitudes of the learners towards CL. A descriptive account of the data is detailed in the results, while a higher level or latent analysis of the data is elaborated in the discussion.

Furthermore, to address the second research question and determine the relationship between the reading comprehension scores and the attitudes of students towards CL, mean scores of the reading comprehension test results by Gonzales and Torres (2015) and the survey questionnaire results of the CL group were correlated using SPSS v. 22 for the Macintosh by subjecting both comprehension test and survey scores to a bivariate Pearson correlation test.

#### **Findings**

What follows are the researchers' findings after the analysis. These findings are outlined by the two research questions, that is, to (1) identify learners' attitudes towards CL and (2) identify the relationship between these and reading comprehension. Thus, to facilitate easier reading, it has been divided into two main parts, reflecting the research questions.

#### What are the learners' attitudes towards cooperative learning? *Responses to Interviews*

This section focuses on the findings from the interview. The transcript of the interview has been translated to English from Taglish, a variety of Tagalog with English words, i.e., a mixed language involving Tagalog and English (not a local variety of English) (Bautista, 2004), for the purposes of this study. The original transcript can be found in Appendix 2. For organization, the student interview section has been divided into two parts: lecture group and CL group.

Interview excerpts:

1. What was your impression of the CL-based CIRC sessions?

<u>Student 1</u>: I think we learned on how to cooperate with our classmates better. <u>Student 2</u>: It requires us to do a lot of work but it's worth it.

2. Do you prefer group activities or interactive lecture?

<u>Student 1</u>: I prefer group activities because there is more interaction with my classmates with the task given.

Student 2: The group activities because almost everyone can participate.

3. What are the advantages and disadvantages of cooperative group work?

<u>Student 1</u>: In cooperative group work, one advantage is that we are more involved in the lesson. A disadvantage would be the chaos. It could be quite noisy.

<u>Student 2</u>: One of the advantages is that there is no overshadowing of students because since it is a cooperative group work, everyone is considered equal. As for the disadvantages, I couldn't think of any.

4. Do you prefer working in large (7 or more persons) or small (4 or less persons) groups? Why?

<u>Student 1</u>: I prefer smaller groups because it is easier to handle. <u>Student 2</u>: Small group because the tension of having more competitors is there.

5. Do you prefer to work on your own rather than in a group? If so, why?

<u>Student 1</u>: I prefer cooperative group work because there are more of us thinking and sharing ideas. <u>Student 2</u>: In a group because there are a lot of opinions in which you can base your answers from.

6. What did the CL activity help you overcome?

<u>Student 1</u>: I have more confidence to share what I have to say about others. <u>Student 2</u>: None that I could think of.

7. What difficulties did you encounter in the CL activity? What did you find hard to do or understand during the activities?

<u>Student 1</u>: It is kind of hard because there are certain group members that are hard to work and cooperate with.

Student 2: Some members are not participating.

8. Would you prefer if your teachers used more group activities/assignments? Why?

<u>Student 1</u>: Yes, because when we work as one, we learn more. <u>Student 2</u>: Yes, so the class will be active.

The transcript reveals that the interviewed students perceived the CL approach to require them to do more work compared to their usual class activities but it was considered worth it since they learned how to better cooperate with their classmates. Respondents also highlighted the fact that participation and interaction with their classmates can be maximized during cooperative group work. Additionally, the interviewees from the CL group think that the CIRC method can be advantageous because they are more involved in the lesson and no one gets left behind because every member of the group is treated equally. One respondent felt that the chaos and noise that comes with this method is a disadvantage.

The thought of working in small groups also appealed more to the students because it is easier to handle and having smaller groups would entail having more competitors. One student also mentioned that the CL activities helped them gain more confidence when sharing about what they think with the group. The students also mentioned some of the difficulties they encountered during the CL activity implementation, including having to encourage some of their group members to participate and cooperate during the activity. Despite these drawbacks, the two interviewees from the CL group said that they would still prefer if their teachers would use more group activities because it helps them become more active and working together helps them learn more.

#### **Responses to 25-item survey questionnaire**

The following section shows the descriptive and inferential results of the 25-item survey questionnaire administered to the CL group after the CIRC activities. For organization purposes, the researchers divided the results into two major parts: (1) descriptive statistics, which shows the frequency, mean, and standard deviation, and (2) inferential statistics, which shows the correlation. The descriptive statistics part of this section was further divided into five parts, to represent the five pillars of cooperative learning, as mentioned by Johnson, Johnson, and Smith (1998). The results for this section help answer research questions one and two.

	Positive Interdependence								
No.	Survey	SD f (%)	D f(%)	A f(%)	SA f(%)	Mean (M)	Std dev		
1	I felt happy about the success of the group as a whole.	0 (0.0)	2 (2.94)	35 (51.47)	31 (45.59)	3.43	0.555		
2	We assisted each other while solving problems during the session.	0 (0.0)	1 (1.47)	47 (69.12)	20 (29.41)	3.28	0.484		
3	I was able to share the load of the work with my group members.	0 (0.0)	4 (5.88)	42 (61.76)	22 (32.35)	3.26	0.563		
4	I managed to depend on my members as they depend on me.	2 (2.94)	9 (13.24)	43 (63.24)	14 (20.59)	3.01	0.680		
5	I was able to value the contributions of the other members of the group.	0 (0.0)	8 (11.76)	24 (35.29)	36 (52.94)	3.41	0.696		

Note. 1- Strongly Disagree (SD), 2- Disagree (D), 3- Agree (A), and 4- Strongly Agree (SA)

*Figure 3A*. Descriptive Statistics for the CL Group in their Attitude towards Cooperative Learning Regarding Positive Interdependence

Figure 3A summarizes the results for the *positive interdependence* part of the 25-item survey questionnaire. Based on the data, most respondents found CL favorable in terms of *positive interdependence* since it allowed them to assist each other in addressing problems. It also helped them delegate work and work together interdependently, making them appreciative of the contributions of their group members. One notable thing is that almost all of the learners were happy about the success of the group (M=3.43). Thus, based on these results, it could be said that the learners had a positive outlook and response towards the idea of *positive interdependence* in CL.

Individual and Group Accountability								
No.	Survey	SD f (%)	D f(%)	A f(%)	SA f(%)	Mean (M)	Std dev	
1	I made positive contributions of the other members of the group.	0 (0.0)	2 (2.94)	34 (50.00)	32 (47.06)	3.44	0.557	
2	I was able to find working cooperatively very motivating.	0 (0.0)	7 (10.29)	37 (54.41)	24 (35.29)	3.25	0.632	
3	I managed to contribute my knowledge to the team.	0 (0.0)	3 (4.41)	37 (54.41)	28 (41.18)	3.37	0.571	
4	I was able to share my knowledge, and take into account the knowledge of the other group members.	1 (1.47)	4 (5.88)	34 (50.00)	29 (42.65)	3.34	0.660	
5	I was aware exactly of what my part in the group was.	0 (0.0)	2 (2.94)	30 (44.12)	36 (52.94)	3.50	0.560	

Note. 1- Strongly Disagree (SD), 2- Disagree (D), 3- Agree (A), and 4- Strongly Agree (SA)

*Figure 3B.* Descriptive Statistics for the CL Group in their Attitude towards Cooperative Learning Regarding Individual and Group Accountability

Figure 3B shows the attitude of the CL group toward individual and group accountability in CL statistically. According to the figure, most of the students favor the CL-based CIRC activities because it allowed the

individual members of the group to make positive contributions, contribute knowledge, and listen to other members' opinions. Apart from being very motivated, almost all the students in the CL group were aware of their roles in the group (M=3.50). From this, one could say that the learners responded positively towards CL when it comes to *individual and group accountability*.

	Face-to-face Promotive Interaction								
No.	Survey	SD f (%)	D f(%)	A f(%)	SA f(%)	Mean (M)	Std dev		
1	Cooperating in a group promoted better understanding of the subject.	1 (1.47)	2 (2.94)	32 (47.06)	33 (48.53)	3.43	0.630		
2	By raising questions among group members help improved the understanding of the lesson.	0 (0.0)	8 (11.76)	38 (55.88)	22 (32.35)	3.21	0.636		
3	The interaction with my peers helped improve my performance.	0 (0.0)	11 (16.18)	30 (44.12)	27 (39.71)	3.24	0.715		
4	Interaction among group members helped me to obtain a deeper understanding of the subject.	0 (0.0)	4 (5.88)	39 (57.35)	25 (36.76)	3.31	0.580		
5	We made effective decisions together as a group.	0 (0.0)	5 (7.35)	26 (38.24)	37 (54.41)	3.47	0.634		

Note. 1- Strongly Disagree (SD), 2- Disagree (D), 3- Agree (A), and 4- Strongly Agree (SA)

*Figure 3C.* Descriptive Statistics for the CL Group in their Attitude towards Cooperative Learning Regarding Face-to-Face Promotive Interaction

Figure 3C statistically reveals the attitudes of the learners towards CL when it comes to face-to-face promotive interaction. As shown in Figure 3C, most of the learners had a favorable response to CL regarding face-to-face promotive interaction since it helped them understand the subject and lesson better as well as improving their performance. According to Figure 3C, it is clear that almost all of the students also claimed to make effective decisions while in the group (M=3.47). Generally, the results indicate that learners exhibited a positive response towards CL in the *face-to-face promotive interaction* aspect.

Interpersonal Skills								
No.	Survey	SD f(%)	D f(%)	A f(%)	SA f(%)	Mean (M)	Std dev	
1	I was able to listen to and respect the ideas of others.	1 (1.47)	2 (2.94)	26 (38.24)	39 (57.35)	3.51	0.635	
2	Working cooperatively with my group is less stressful.	0 (0.0)	4 (5.88)	35 (51.47)	29 (42.65)	3.37	0.596	
3	Through working cooperatively in a group helped improve my communication skills.	1 (1.47)	4 (5.88)	35 (51.47)	28 (41.18)	3.32	0.657	
4	I was able to share my ideas, personality, workload, and so on with the rest of my group members.	1 (1.47)	3 (4.41)	33 (48.53)	31 (45.59)	3.38	0.647	
5	I had the opportunity to communicate with my group members.	1 (1.47)	3 (4.41)	27 (39.71)	37 (54.41)	3.47	0.657	

Note. 1- Strongly Disagree (SD), 2- Disagree (D), 3- Agree (A), and 4- Strongly Agree (SA)

*Figure 3D.* Descriptive Statistics for the CL Group in their Attitude towards Cooperative Learning Regarding Interpersonal skills

Figure 3D statistically illustrates the attitudes of the learners in the CL group towards CL with regard to *interpersonal skills*. From the figure, one can see that most of the students favored the CL-based CIRC approach because they could share ideas as well as the workload with the rest of the group and improve their communication skills with little stress. Moreover, almost all the learners had the opportunity to communicate while being respectful and attentive to the ideas of others (M=3.51). Given the results, it could be said that the learners in the CL group had a generally positive response towards CL in terms of *interpersonal skills*.

Group Processing									
No.	Survey	SD f (%)	D f(%)	A f(%)	SA f(%)	Mean (M)	Std dev		
1	My group managed to achieve our group goals.	0 (0.0)	3 (4.41)	32 (47.06)	33 (48.53)	3.44	0.583		
2	Working in group help enhanced cooperation among the group members.	0 (0.0)	3 (4.41)	28 (41.18)	35 (51.47)	3.44	0.632		
3	I enjoyed working with my group members as a team.	0 (0.0)	5 (7.35)	32 (47.06)	31 (45.59)	3.38	0.624		
4	Working cooperatively helped to reduce my misconceptions about the topic.	0 (0.0)	2 (2.94)	35 (51.47)	31 (45.59)	3.43	0.555		
5	I was able to learn through my mistake and be tolerant with my group members.	0 (0.0)	2 (2.94)	35 (51.47)	31 (45.59)	3.43	0.555		

Note. 1- Strongly Disagree (SD), 2- Disagree (D), 3- Agree (A), and 4- Strongly Agree (SA)

Figure 3E. Descriptive Statistics for the CL Group in their Attitude towards Cooperative Learning Regarding Group Processing Skills

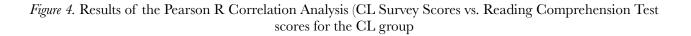
Figure 3E summarizes the survey scores of the CL group when it comes to group processing. The data makes it clear that the learners favor the CL approach since their group fostered cooperation among members, achieved goals, and enjoyed working as a team. Furthermore, it is evident that the intervention helped reduce misconceptions and promoted tolerance among the members of the team. It could be gathered from the data that the learners showed a positive response towards the CL-based CIRC activities regarding group processing.

# What is the relationship between the identified Cooperative Learning attitudes and reading comprehension?

Figure 4 shows the correlation coefficients and the significance values between the CL survey scores and the reading comprehension test scores of the CL group (n=68). Furthermore, Figure 5 illustrates this correlation through a scatter plot. There is a less than weak correlation between the CL attitude and the reading comprehension skills of the CL group (p=0.029).

		Cooperative Learning Survey Scores	Reading Comprehension Test Scores (Experimental)
Cooperative Learning Survey	Pearson Correlation	1	0.265*
Scores	Sig. (2-tailed)		0.029
	N	68	68
Reading Comprehension	Pearson Correlation	0.265*	1
Test Scores	Sig. (2-tailed)	0.029	
(Experimental)	N	68	68

\*Correlation is significant at 0.05 level (2-tailed)



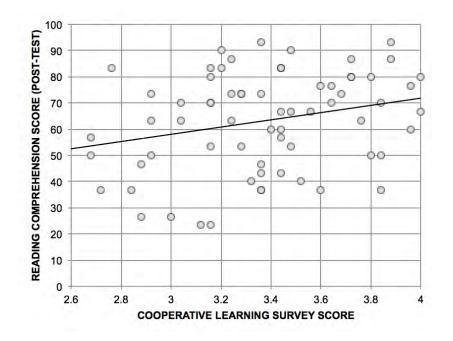


Figure 5. Scatterplot of Correlation between Survey Scores And Reading Comprehension Test Scores for the CL Group

# Discussion What are the learners' attitudes towards cooperative learning?

Our first inquiry regarding the attitudes of the learners toward CL was answered by the findings of the survey and interview protocol. When it comes to their attitudes, they seem to prefer group activities over the conventional lecture due to the increased quantity of interaction and input. The same is observable between group activities and individual work. These could probably be best explained by the impact of peer interaction, a distinct feature of CIRC, on the learners' interest and motivation. Several studies support this claim by showing that interacting with peers can increase engagement and motivation (Box & Little, 2003; Dufresne, Gerace, Leonard, Mestre, & Wenk, 1996; Lei, 2010; Palmer, 2007; Tinto, 1987). Considering learners' preference for group activities, it was further discovered that learners in the CL group preferred small groups over large groups because they were more manageable for the respondents. Similar studies also advocate small groups over big groups, especially when it comes to CL (Stanford University Newsletter on Teaching, 1999; Ward, 1987). Wheelan (2009) supports this study's finding in their discovery that the smaller the group size, the higher the productivity of the learners. The researchers believe that a possible reason for this may have something to do with group identification and dynamics. Their belief is affirmed by Cummings, Kiesler, Zadeh, and Balakrishnan (2013) who pointed out that being in a smaller group would be more beneficial because the group members do not need to spend a lot of time and energy in coordinating and motivating each other, a potential challenge for larger groups.

Aside from their preferences for group activities and small groups, learners in the CL group favored CL because it made them more attentive, which is in contrast to learners in the lecture group. A possible factor could be the method adopted by the teacher. Prince (2004) showed that the attention span of learners in a traditional lecture lasts roughly 15 minutes. Moreover, Hartley and Davies (1978) found that students remembered 70% of the provided information for the first ten minutes of a traditional lecture and only 20% of the information in the last 10 minutes. Based on these studies, it would appear that the lecture method may not be very effective in retaining the attention of the students for the long term. However, in active learning, the same may not be said. Using clickers to measure attention decline, Bunce, Flens, and Nieles (2010) recorded fewer attention lapses during student-engaging activities as opposed to a traditional lecture, where teacher discourse is given significant attention. Their study suggests that active learning methods can increase student attention, which could explain why the learners in this study were able to be attentive during the CL activities.

Based on the results of this study, the learners of the CL group also favored CL because it encouraged them to be more participative, involved, and confident throughout the sessions; this is similar to Valdez' (2015) study which found that CL appealed to learners because it can help make them more engaged and participative. According to Krashen's (1982) *Affective Filter Hypothesis*, a safe and anxiety-free environment can encourage learners to produce more language, a step towards better performance. In other words, learners perform better if they feel that they are able to express their ideas without being judged. Another possible reason why the participants were more involved and confident is because CL can promote mutual respect, responsibility, tolerance, and, most importantly, self-confidence (Zakaria, Solfitri, Daud, & Abidin, 2013); this may explain why the respondents mentioned that they felt more confident, involved, and participative in sharing with their peers in small groups.

From the results, it was also discovered that CL appealed to the learners because it improved their performance. More specifically, results indicated that learners favored CL because it reduced their misconceptions and helped their comprehension of topic. These findings were affirmed by Tuan' (2010) study, which demonstrated that CL was favorable to Vietnamese learners because it improved their understanding. The effectiveness of CL in comprehension could possibly explain this. Several studies have been done with a wide variety of learners around the world and many of them have found similar results—an increase in reading comprehension (Bolukbas, Keskin, & Polat, 2011; Jalilifar, 2010; Pan & Wu, 2013; Wichadee, 2005).

Apart from enhanced performance, learners favored CL because it made them more tolerant and sensitive to others in the group. In addition, it helped them to be more appreciative of one another's contributions and to make more effective decisions. The findings of the study also showed that the learners' favorable attitudes towards CL can be attributed to its ability to help them achieve more as a group while having fun. Similar results are evident in Neo et al.'s (2012) study, which showed that Malaysian learners also favored CL because it helped them become more tolerant, make more effective decisions, and to achieve more as a group; *Action Regulation Theory*, which states that an individual's behavior in the group is regulated by cognitive processes such as goal

development, planning, and feedback processing could explain these results (Zacher & Frese, 2015). In other words, being aware and sensitive of the contributions and feedback of others influences how learners make decisions, behave in groups, and perceive CL.

Although most of the learners had a positive attitude towards CL, some learners still have certain reservations towards the approach. The researchers discovered that learners somehow disapproved of CL with regard to hitch-hiking, or the act of taking credit not rightfully earned, which could have resulted in their preference for working alone more than in a group. Er and Aksu Ataç (2014) and McLeish (2009) studies show similar results when it comes to learners' preferences for working individually rather than in a group. *Expectancy-Value Theory*, which holds that performance is dependent on the value individuals attach to an outcome, plays a crucial role in these findings. Based on the results of this study, learners were also not in favor of CL because it requires more effort and work. However, despite reservations, the learners generally had positive attitudes towards CL.

# What is the relationship between the identified Cooperative Learning attitudes and reading comprehension?

The researchers' second inquiry sought to identify a relationship between reading comprehension scores and the attitudes of students towards CL. A very weak positive correlation between both was identified by the researchers, evidenced by Pearson correlation value of 0.265, manifested in an almost horizontal trend apart from the relatively dispersed plot points. Put differently, a positive attitude towards CL appears to have little to no effect on reading comprehension scores. Interestingly, this is reflective of what Ghaith and Bouzeineddine (2003) discovered: that there is no relationship between CL attitude and reading achievement, which could possibly be explained by the differences in gender, aptitude, and strategies. The researchers also speculate that one of the reasons that may have affected the findings is the nature of the reading comprehension test in Gonzales and Torres (2015). Although the comprehension tests were, at the least, encompassing of the comprehension subskills focused here, it is not only through paper-based multiple-choice type assessment that one gauges reading comprehension, so the tests might not fully reflect the students' performance, particularly in the higher-order cognitive skills such as evaluation. Perhaps more tests that effectively gauges comprehension such as performance-based authentic assessment would yield a different result. Furthermore, the researchers also hypothesize that implementation time may have influenced the findings. Since the study was conducted in a short span of time, it is possible that the results of the test are not fully indicative of the students' performance as opposed to if it were to be conducted longitudinally.

#### Conclusion

The researchers implemented the cooperative learning CIRC strategy activities over two teaching sessions over three weeks. Utilizing a mixed-approach research design, the researchers discovered that participants exhibited favorable attitudes towards the CL approach with certain reservations, which tends to affirm the effectiveness of CL. The students favored CL due to the small group size, ability of the activity to grab their attention and make them participate, and the potential of the activity to help them better understand the lesson. Not only did CL appeal to the learners because of the high-level participation and interaction, it also encouraged the learners to be more sensitive to one another, make more effective decisions, and achieve more as a group. The researchers, however, identified a very weak relationship between attitudes towards CL and reading comprehension, which suggests that a better attitude towards CL does not equate to, or rather necessitate, better reading comprehension performance of ESL learners.

Nevertheless, considering both the qualitative and quantitative findings of this study as well as the potential value of CL if all the aforementioned issues were addressed, the researchers still recommend that teachers utilize the CL approach since learners responded favorably to the approach. Educators may opt to utilize resources from the Internet to aid them in their CL activities and to consult with other teachers to lessen the burden of CL

lesson development. Furthermore, the researchers recommend the CL approach in teaching reading comprehension because it allows learners to thoroughly process the information instead of just recalling the details and also encourages learners to express their ideas, which was evidenced during observation.

The researchers see the potential of the CL approach in other ESL classrooms in the Philippines and some other Southeast Asian countries; more observations be done in different classrooms across the country to improve the reliability of the study. Since certain limitations such as time made this research short-term, it might be helpful to consider widening the scope and doing a longitudinal study in different contexts.

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	1	2	3	4
A. Positive Interdependence	Strongly Disagree	Disagree	Agree	Strongly Agree
1. I felt happy about the success of the group as a whole.				
2. We assisted each other while solving problems during the session.				
3. I was able to share the load of the work with my group members.				
4. I managed to depend on my members as they depend on me.				
5. I was able to value the contributions of the other members of the group.				

# Appendix 1 25-item survey questionnaire based on Neo et al. (2012)

B. Individual and Group Accountability	<b>1</b> Strongly Disagree	<b>2</b> Disagree	<b>3</b> Agree	<b>4</b> Strongly Agree
1. I made positive contributions to the group.				
2. I was able to find working cooperatively very motivating.				
3. I managed to contribute my knowledge to the team.				
4. I was able to share my knowledge, and take into account the knowledge of the other group members.				
5. I was aware exactly of what my part in the group was.				

C. Face-to-face Promotive Interaction	<b>1</b> Strongly Disagree	<b>2</b> Disagree	<b>3</b> Agree	<b>4</b> Strongly Agree
1. Cooperating in a group promoted better understanding of the subject.				
2. By raising questions among group members help improved the understanding of the lesson.				
3. The interaction with my peers helped improve my performance.				
4. Interaction among group members helped me to obtain a deeper understanding of the subject.				
5. We made effective decisions together as a group.				

	1	2	3	4
D. Interpersonal Skills	Strongly	Disagree	Agree	Strongly
	Disagree	-	1	Agree
1. I was able to listen to and respect the ideas of others.				
2. Working cooperatively with my group is less stressful.				
3. Through working cooperatively in a group helped improve my communication skills.				
4. I was able to share my ideas, personality, workload, and so on with the rest of my group members.				
5. I had the opportunity to communicate with my group members.				

	1	2	3	4
E. Group Processing	Strongly	Disagree	Agree	Strongly
	Disagree			Agree
1. My group managed to achieve our group goals.				
2. Working in group help enhanced cooperation among				
the group members.				
3. I enjoyed working with my group members as a				
team.				
4. Working cooperatively helped to reduce my				
misconceptions about the topic.				
historiceptions about the topic.				
5. I was able to learn through my mistake and be				
tolerant with my group members.				

	Student 1	Student 2
Do you prefer group activities or interactive lecture?	"I prefer group activities because I can learn. Kasi ano, mas naeenjoy ko and naiintindihan ko pag alam ko kung ano po yung mga point of view ng mga kaklase ko."	"Cooperative group work Um sa sarili kong perspective na-eenjoy ko kasi mas natututo ako pag nageenjoy ako. Mas nageenjoy ako pag kasama ko friends ko."
Would you prefer if your teachers used more group activities/assignments? Why?	"Maybe. Because minsan kasi sa group activities yung ibang kagrupo mo hindi gumagawa kaya minsan mas gusto ko sarili ko nalang."	"Group activities kasi mas nakakawork po with friends."
Do you prefer to work on your own rather than in a group? If so, why?	"Sometimes I like to work individually kasi minsan talaga sa group activities, konti nalang po yung maaasahan mo kaya minsan naaako ko na rin lahat."	"Individual. Kapag pinaghirapan ko mas worth it pag nakakuha ako ng mataas na points."
Aside from lectures, how do they want to learn?	"Gusto ko po yung may mga games para hands on."	"Ako laro miss, games."

# Appendix 2 Original interview transcript

# **CL Group**

	Student 3	Student 4
What is your impression on the CIRC sessions?	"I think we learned more on how to cooperate with our classmates."	"Matrabaho po pero worth it naman."
Do you prefer group activities or interactive lecture?	"Prefer ko po yung group activities kasi po mas nakakapaginteract po kami sa mga classmates naming tska sa mismong gagawin."	"Yung group activities po kasi parang halos lahat nakakasali."
What are the advantages and disadvantages of cooperative group work?	"Kapag cooperative group work po, involved po kami dun sa mismong lesson at disadvantages po medyo magulo rin minsan, medyo maingay, ganun."	"Yung advantages parang walang naoovershadow na estudyante, parang lahat pantay pantay kasi cooperative group work. Tapos sa disadvantages, parang wala naman po."

Do you prefer working in large (7 or more persons) or small (4 or less persons) groups? Why?	"I prefer smaller groups po kasi mas madali pong i parang contain po, ganun."	"Small group kasi parang may tension, madami kang ka- kompetensya na group."
Do you prefer to work	"I prefer cooperative group work po	"In a group kasi marami yung
on your own rather than	kasi since marami po kami mas	opinions na pwede mo pagbasehan
in a group? If so, why?	marami pong ideas na masshare."	ng mga sagot."
What did the CL	"Mas confident na po ako mag share	"Wala naman po."
activity help you	ng kung anong naiisip ko sa iba."	
overcome?		
What difficulties did you	"Medyo mahirap po if meron	"Yung mga members po na hindi
encounter in the CL	kaming group member na	nagpaparticipate."
activity? What did you	nahihirapan makipag cooperate	
find hard to do or	samin."	
understand during the		
activities?		
Would you prefer if	"Opo. Kasi nga po kapag gumagalaw	"Opo para active yung class."
your teachers used more	po kami as one, mas natututo po	
group	kami."	
activities/assignments?		
Why?		

# Appendix 3 Permission Form Template

Greetings in St. La Salle!

We are students of De La Salle University – Manila taking up Bachelor of Secondary Education, Major in English. For our Action Research (TH2SEAL) class, we will be conducting a survey on Grade 8 students of Holy Spirit School<sup>1</sup>. The purpose of this survey is to discover your attitudes toward the CIRC activities that we have implemented for the last few meetings.

This 25-item survey is divided into five parts. It is based on Neo et al.'s (2012) survey questionnaire for cooperative learning. It was slightly modified for the purposes of the study.

Please answer the survey as honestly as possible. We assure you that your information will be kept confidential and will only be used for the purposes of this study. By signing this survey, you are allowing us to subject your responses for analysis. Thank you for taking time to answer. Your response is highly appreciated.

Wilkinson Daniel Wong Gonzales Patrisha Lliane Torres

## PERSONAL PROFILE

Surname	G	M.I.	
Sex (Male or Female)	Age		_
Section		eted	
- a - 6.			

Signature

# About the authors:

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