

The Effect of Peer Support on University Level Students' English Language Achievements

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Abstract

The purpose of the study is to investigate the effect of peer support on university level students' English language achievements. An experimental model with pretest-posttest experimental and control group was used with 800 students who were studying at a university in Istanbul vicinity. As experiment group, 400 students (200 of whom "Assistants" and 200 of whom "Supported Students") were included in the Language Teacher Assistant (hereafter LTA) program and monitored through LTA booklet in a weekly period by their teacher. The students in the control group (200 of whom "Not Assistants" and 200 of whom "Not Supported") followed their traditional English lessons and stated that they did not want to be involved in such a program. The data was collected by means of an achievement test named American Language Course Placement Test (ALCPT), evaluated statistically with independent and paired T-test. The findings of four-month-study coincide with the literature and it showed meaningful difference on the achievement scores of the "peer-supported" students. On the other hand it was inferred from the study that the students who assisted lower-level peers were not affected in either side positive or negative.

Keywords: Peer Support, Language Teacher Assistant, Student Achievement, English Language Teaching

1. Introduction

Achievement is defined as "something that has been done or achieved through effort" in Merriam-Webster dictionary. While one's effort determines the results, any kind of support such as formal, informal, social or emotional has also great influence on academic achievement of the students positively. The literature shows consensus on the positive effect of support however support types varies from parental to peer, from teacher to manager, from consultant to social.

From those, "peer support" is a kind of collaborative teaching-learning process which can be defined as student helping another student learn any subject (Newton & Ender, 2010) or active support of students among themselves who have equal status and social grouping (Topping, 2005). It can also be defined as the transference of experience and knowledge from one to another. Although all the researchers have been agreeing on the function of the peer cooperation, this process of student-student teaching has been defined under many different terms by different researchers; Whitman (1988) coined the term "near-peer teaching" and Evans & Cuffe (2009), Ten Cate & Durning (2007a), McKenna & French, (2011) followed him; while Falchikov (2001), Manning (2003), Mynard & Almarzouqi (2006), Iwata, Furmedge, Sturrock, & Gill, (2014), and Alrajhi & Said (2015) defined this process as "peer tutoring". McKenna & French (2011) used the term "peer assisted learning" but Manning (2014) preferred "peer support".

No matter how different this method is defined by researchers, the basic structure of the peer support is to match a lower level student with a successful student so that lower level student may increase his academic performance without any stress driven by an authority, in this context "teacher". However, as Tella (2013) stressed, peer support should not be considered as the replacement of the teacher but additional support to ongoing teaching process.

Instead of such replacement, we should make use of peer support in different aspects such as to raise students self-confidence and communication skills (Schleyer et al., 2005); to raise students reading performances (Saenz, Fuchs & Fuchs, 2005); to create positive social behavior among students (Plumer & Stoner, 2005); and to have students with more learning responsibility and to provide positive learning environment (Baillie & Grimes, 1999). Learners also reported that peer supporters can better understand the needs of their friends (Ten Cate et al., 2012).

Although these studies were undermined the effects of organized peer support, Falchikov (2001) argued that all

schools already have an informal peer support system but what makes difference is whether the supporters are trained or not. And, nonetheless, aforementioned benefits of peer support some researchers pointed out some challenges on this process. For instance, Beasley (1997) mentioned that personal clashes that can take place during peer support process and also attendance problems may occur. He argued that such programs should be designed to prevent any problems.

Reviewing the literature it can be concluded that vast amount of research has been done on the effectiveness of peer support however almost none research has been conducted on the effect of peer support on supporters' English language achievement. Therefore, this study is aimed to fill this gap by conducting an experimental research design (Creswell, 2012).

2. Purpose of the Study

The purpose of the study is to reveal the effect of peer support on university level students' (both assistant and supported students) English language achievements. The present study aims to prove following hypothesis;

- 1- There is an increase on the achievements of (pretest-posttest) "assistant and not assistant students".
- 2- There is an increase on the achievements of (pretest-posttest) "supported and not supported students".
- 3- There is a meaningful difference in the posttest results of experimental and control groups who are considered to be successful students.
- 4- There is a meaningful difference in the posttest results of experimental and control groups who are considered to be unsuccessful students.

3. Methodology

This part of the research includes the research model, participants, development of data collection tools, how the data is collected and analyzed.

3.1 Research Model

An experimental research design was used to compare the achievement scores of "assistant and not assistant students" and "supported and not supported students" over a semester in 2015-2016 academic years. Due to the nature of the experimental research design and to be the real test models participants were assigned randomly.

3.2 Study Group

A total of 800 university level students participated in the study. Students of a boarding university in Istanbul were given a chance to volunteer as "Language Teacher Assistant" and the only criterion was to be follow advanced level English language classes. The number of assistants which constituted our first experimental group was limited to 200 and another 200 advanced level English learners were randomly assigned for our first control group. These 400 students were identified as successful students. For each assistant one unsuccessful student paired and this formed our second experimental group under the unsuccessful category. 200 unpaired unsuccessful students were named as second control group of the study. The design of the study group can be seen clearly in Table 1.

Table 1. Design of the Study Group

	<u>Experimental</u>	<u>Control</u>
<u>Successful</u>	Assistant (200)	Not Assistant (200)
<u>Unsuccessful</u>	Supported (200)	Not Supported (200)

As it is required to have similar achievement results before the experimental process, students' pretest scores have been analyzed by independent T-test and there is not significant (meaningful) difference, " $\alpha=0.05$ level", between both pairs in terms of both achievement levels. It can be concluded that both the experimental and control groups were equivalent in terms of achievement levels before the experimental process.

3.3 Data Collection Tool and Its Development

A standardized test named "American Language Course Placement Test", for which 54 minutes was allocated,

has been used for the data collection. Expert views were gotten for the content validity of the test and to ensure the reliability of the test, it was tried on 200 students by internal consistency coefficient. The reliability coefficient of the data collection tool used in this study was found to be 0.98 by Split- half method and 0.96 according to KR-20 Coefficient of Reliability. It can be concluded that the reliability of the data collection tool is very high. The high reliability value ensures high face and content Validity.

3.4 Data Collection

Form the very beginning of the 2015-2016 academic years both groups (2 experimental and 2 control groups) were administered ALCPT for the pretest. Throughout the semester (15 weeks), experimental groups keep their logs in LTA booklets in accordance with the supervision of the academic staff and those logs were checked in a weekly period by the class-teachers. In the meantime, control group followed their lessons as is scheduled in their curriculum. At the end of the semester, all students were again administered an ALCPT as a posttest to see whether the treatment worked or not.

3.5 Data Analysis and Interpretation

The data was analyzed using Statistical Package for the Social Sciences 22 (SPSS, SPSS Inc., Chicago), and the differences between groups and pretest-posttest results have been tested at the level of $\alpha=0.05$. Firstly, paired T-test has been used to determine whether there is a significant difference in pretest-posttest scores of each group. Then, independent T-test has been used to find out whether there is difference in posttest results of experimental groups and control groups in terms of achievement scores. Results were considered statistically significant for the “unsuccessful experimental group” if the p value was <0.05 . The result of the research is given in the following part in detail.

4. Findings

A total number of 800 university level students participated in this study in the fall semester of 2015-2016 academic years. For the reason of being a military academy there were no female participants in the study. Furthermore, although students were educated in five different majors they had similar backgrounds therefore; the researcher did not investigated whether there was a correlation between their majors and their performances.

The results of the analysis in accordance with the hypotheses of this study are given below and to falsify our Null Hypothesis each group’s pretest and posttest scores were analyzed by Paired T-test.

1- There is an increase on the achievements of (pretest-posttest) “assistant and not assistant students”.

It can be clearly observed from Table 2 that, both groups increased their achievement scores. While “assistants” pretest scores were 86,75 they increased it to 87,78 after 15 weeks of teaching their peers, “not assistants” increased their scores from 86,12 to 87,61. Besides both groups increased their scores at the end of the semester, the difference between each groups’ means is realized as 0,46. There is a statistically significant difference ($p<0.05$) between groups’ pretest and posttest scores however effect size (d) for assistants was found to be 0,19 and 0,25 for not assistants shows slight increase at the level (Green and Salkind, 2005).

Table 2. Results of Paired T-test (Pretest & Posttest) of the Students on Achievement Levels in Experimental and Control Groups

Group	Subgroups	Test	\bar{x}	N	SD	$\bar{x}_1 - \bar{x}_2$	T	df	p
Successful	Assistant (Experimental-1)	Pre	86,75	200	3,85	-1,03	-2,68	199	.008
		Post	87,78	200	5,07				
	Not Assistant (Control-1)	Pre	86,12	200	5,30	-1,49	-3,64	199	.000
		Post	87,61	200	4,14				
Unsuccessful	Supported (Experimental-2)	Pre	42,00	200	18,47	-6,38	-8,40	199	.000
		Post	48,38	200	16,69				
	Not Supported (Control-2)	Pre	41,41	200	15,73	-1,61	-2,76	199	.006
		Post	43,02	200	16,79				

$P < 0.05$

2- There is an increase on the achievements of (pretest-posttest) “supported and not supported students”.

According to the results of paired T-test, it can be inferred from Table 2 that supported and not supported groups increased their achievement scores as well. Peer supported group’s pretest scores were 42,00 at the beginning of the treatment and they increased it to 48,38 after the experiment, “not supported” group increased their scores from 41,42 to 43,02.

The Null Hypothesis can be falsified that each group increased their scores at the end of the semester and there is a statistically significant difference ($p < 0.05$) between groups’ pretest and posttest scores. Looking at the effect size (d) to clearly identify the effect of the treatment, the d of the supported group is 0,59 which is at the acceptable level but 0,19 (slight increase) for the not supported group (Green and Salkind, 2005).

The results gathered in this study showed that no matter how different technics facilitated during English language teaching, learning was occurred but in different levels.

3- There is a meaningful difference in the posttest results of experimental and control groups who are considered to be successful students.

The study constructed on two experiment groups and two control groups. The first experiment and control group is composed of “successful” students according to their ALCPT scores. From Table 3 it is apparent that both groups’ posttest scores are very close which cannot falsify our hypothesis.

The actual p was realized as 0.71 at the $p < 0.05$, it shows there is not statistically significant difference between the scores of assistants and those who are not assistants. Being in the role of teaching did not affect the ultimate test scores of the assistants.

Table 3. Results of Independent T-test on Posttest Scores of both Experimental and Control Groups

Group	Subgroups	\bar{x}	N	SD	$\bar{x}_1 - \bar{x}_2$	T	df	p
Successful	Assistant (Experimental-1)	87,78	200	5,07	.170	.367	398	.714
	Not Assistant (Control-1)	87,61	200	4,14	.170			
Unsuccessful	Supported (Experimental-2)	48,38	200	16,69	5,35	3,198	398	.001
	Not Supported (Control-2)	43,02	200	16,79	5,35			

$P < 0.05$

4- There is a meaningful difference in the posttest results of experimental and control groups who are considered to be unsuccessful students.

The second experiment and control group is composed of “unsuccessful” students according to their ALCPT scores. In Table 3 it can be clearly seen that experiment group’s posttest score is much higher than controls groups’.

The p was realized as 0.001 at the $p < 0.05$ which means there is meaningful difference between the posttest scores of supported and those who are not supported.

The results of the present study demonstrate that the paired and independent T-test, which is applied to identify the effect of peer support on university level students’ (assistants, not assistants, supported and not supported students) English language achievements, showed that all groups’ achievement scores are increased however the only meaningful difference is observed in “supported” students’ scores. Successful students who were involved in the experiment were not affected in either way positive or negative.

5. Discussion, Result and Suggestions

The achievement of the learners has always been on the spot that many precautions and additional programs have being implemented by the institutions. However, the fundamental step to learn better is the involvement and contribution of the learner in the learning process (Bonner, 2002). To make this fundamental purpose real, best

method seems to assign them teaching roles under different names such as peer-teacher, peer-tutors, teacher assistants, peer-supporters.

This paper examined the effects of peer support on both successful and unsuccessful students' achievements. While the finding of unsuccessful students' findings supports the previous literature, the findings of the successful students' data do not overlap with the previous literature.

First of all, Williams & Fowler (2014) made a contribution to the literature and they implied that final year clinical unit scores of near-peer teachers show meaningful difference compared the students who did not involve in such programs. However, in this study, there is not a statistically significant difference between assistants and not assistants. Williams & Fowler (2014) did their study in the field of Emergency Health which is based more on praxis though English is more on theory. Moreover, the assistants in this study had higher level of English and they taught and helped their peers about lower level subject which explains why they did not increase their scores as expected.

Furthermore, Mynard & Almarzouqi (2006) investigated a qualitative research and they also mentioned about how peer-teachers feel about their learning experiences. They also looked at the peer teaching programs from a different aspect and the found out that self-satisfaction of the students were increased and felt themselves useful for the community which is a kind of sociocultural dimension of helping others and. They listed some more benefits of such programs i.e. responsibility, developing friendship. As the current study built on quantitative data the researcher was not able to gather such valuable info.

Additionally, In peer-teaching process, supported students find supportive environments for the difficult concepts covered in class and they improve their learning (Baillie & Grimes,1999). Saenz, Fuchs & Fuchs (2005) worked with the students who had difficulty in learning found that they did meaningful difference on their scores compared to control group. In the light of both study, the current study go along with the previous studies as supported students posttest result shows statistically significant difference.

Finally, it is clear that student with low English level get benefitted from this program and many researches proven this. In our case, successful students did not increased their results as expected due to low level topics of their friends lessons however their attitudes have changed positively. Therefore, to identify affective impact of peer-support should be investigated through qualitative research. Moreover, to increase the effect size of the supported group, assistant should be guided and tracked by their instructors in more organized manner.

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