The Influence of Language Games on Students' Learning Outcomes in English Vocabularies in Early Grades

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Abstract

Vocabularies are considered as the most commanding component for any foreign language learning such as English. Despite the importance of vocabularies, they are being taught in a customary, conventional and uninterested manner in government schools of Pakistan. On the other hand, in teaching English vocabularies specially to young learners/students, Language games are being used globally. The purpose of this study was based on influence of language games with observed variable of students' learning outcomes with English vocabularies. Quasi-Experimental of pure quantitative type was adopted as being suitable with the nature of the study. Nonrandomized control group pre-test post-test design was selected for this study. Through convenient sampling, the population of the study was delimited to one government school of Quetta city. The data collecting tool was a teacher made test. Class three stuednts were divided into two groups comrasing thirty students in each. Customary and game pedagogy were used to teach English vocabularies for six weeks. Using SPSS 23 version, the data was analysedby simple descriptive and inferential statistics. It was concluded through the findings that in teaching English vocabularies, language games have a substantial influence on students' learning outcomes.

Keywords: vocabularies, languages games, learning outcomes, English language

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Introduction

Language is considered as a binding instrument to connect human being socially with each other (Reddy, 2016). One of the important area of any language is its vocabulary learning and usage. Learning of vocabularies becomes more vital when someone learns any second or a foreign language (Alqahtani, 2015).

Globally, there are various languages being spoken in the whole world. These languages are used as mother, national, or international languages. Among all, however, English is considered as the most important language (Fareh, 2010). English is considered as lingua franca to communicate internationally for business, education, health and other areas among different nations (Khan & Khan, 2016). In addition to this, English is being used in the modern world to get connected with other countries for advancement in science, technology, trade or any other field of life. Therefore, English is considered as a token of success and prosperity (Panezai & Channa, 2017).

Keeping in view the importance of English language, it was declared as the official language of Pakistan by the founder of Pakistan Quaid-e-Azam Mohammad Ali Jinnah in 1st Educational Conference of Pakistan (Ahmad et al., 2013). In this regard, it was clearly mentioned in the National Curriculum for Languages for Grade 1-12 that learning of English is a commonly valued language throughout the world (Goverment of Pakistan, 2006). Since then English language is introduced in Pakistan, from primary level to higher level for each students, either rich or poor in order to acquire higher education and professional advancement (Goverment of Pakistan, 2006).

According to Dolati and Mikaili (2011), in learning any foreign language, the importance of vocabularies cannot be ignored. Vocabularies connect the elementary listening, reading, speaking, and writing skills of language. On the other hand, these words refer the elements of learning extensively in any foreign language (Palashi, 2016; Silsupur, 2017). Teaching children in an effective and interactive manner has always been found a challenging task for any school teacher (Mahmoud & Tanni, 2012). The challenge becomes even worse when we talk about teaching of English as foreign or second language (Fareh, 2010). Moreover, to overcome the problem, language games are commonly be used everywhere (Rohani & Pourgharib, 2013). Therefore, keeping the nature of children in mind, Wulanjani (2016) pointed out that the better learning of children is only promising, when they play and enjoy.

Unfortunately, aside from the four elementary skills of English language, a traditional and uninterested method is being used in teaching vocabularies (Alqahtani, 2015). As a result, students usually forget the newly learned words due to lack of practice and their interest.

Purpose of the Study

The basic purpose of this study was to find out the influence of language games on students' learning achievement in English language vocabularies. This purpose was also considered as major objective of the study. Following was the research question of the study:
1. Is there a significant difference between the achievement scores of English vocabularies of control and experimental group on post-test?

Research Hypothesis

The study comprised of the following hypothesis as educated guess;
H_0: There is no significant difference between the achievement scores of English vocabularies of control and experimental group on post-test.

Literature Review

According to Alqahtani (2015), the total number of words of any language are considered as the vocabularies of the concerned language. Although grammar is being considered as the foundation of any language, even that foundation cannot be built without having command on vocabularies (Kabiri & Ghafoori, 2015). The value and importance of vocabularies in any language is quite obvious as it connects other elements of language altogether like a glue, so performs the role of binding element (Wulanjani, 2016). One needs to have abundance of vocabularies for better communication and understanding (Awaludin, 2013). Despite the importance of vocabularies in language, they are being taught in a customary method in which students are asked to copy and memorize the taught words (Silsupur, 2017). Students do not show interest in this method of teaching, resultantly teaching learning process becomes passive, tiring, and lifeless (Lam, 2014). On the other hand, in teaching children, one cannot ignore playing because children learn when they play. Learning by playing will not only assist them in early grades but will also in higher grades (Hang & Brussel, 2017).There are a lot of

techniques being used in teaching vocabularies. One of them is game pedagogy (Hidayat, 2016; Silsupur, 2017).

Games are competing element having rules and regulations which become source of generating interest among students (Xiaoyu, 2016). Keeping in view the demands of 21^{ist} century, where the process of teaching and learning should be in accordance with the real life context, games were introduces in language classes (Lu, 2016). Games are advantageous in many perspectives. They generate confidence among the students and motivate them towards learning irrespective of their nature of being lazy or sharp learners (Alemi, 2010). As a result, students enthusiastically participate in the class activities and their active involvement would become the real heart of teaching learning process (Bakhsh, 2016). Games are beneficial in terms of arising students' creativity (Petrovic, 2014).They also become source of enhancing students' score in exams (Dolati & Mikaili, 2011). Having the element of fun, chance of repetition, and the capability of using words attentively are good instructing strategy of teaching vocabularies that are found in games (Wulanjani, 2016).

The influence of language games on students' achievement in vocabulary was investigated by Al masri and Al Najar (2014) . They found games an influential strategy in teaching vocabularies as the experimental group of their study showed greater score than the control group. Similarly the results of experimental research of Kabiri and Ghafoori (2015) declared that students who were taught vocabularies with language games had better performance in posttest than control group despite the fact that both the group showed equivalent performance in pre-test. Thus, they concluded that using games support students at elementary stages of learning foreign language. Similarly, Alemi (2010) conducted a research on educational games as a vehicle of teaching vocabulary. He randomly selected participants from the sample and applied language games on experimental group while no games were used in teaching English vocabularies to control group. The results of his research clearly showed that games intensified students' vocabularies.

Likewise, the post test result of the students of experimental group in the research work of Dolati and Mikaili (2011) showed improvement as compared to the group who were taught with traditional method of teaching. The result further declared that motivational level of the students towards learning vocabularies was augmented in the relaxing, competitive, and cooperative learning environment. In another study by Hidayat (2016), through word games was evidenced with the aim of the classroom action research. The aim of study was to investigate the improvement level of the

students in vocabulary learning. Interview, observation, questionnaire and teacher made test were his data collecting instruments. Both pupil and teachers underwent the process of interviews and observations. In order to know their opinion about game pedagogy, the questionnaire was given and lastly both at the start and after the treatment, the teacher made test was given. The analysis of the collected data provided proof that games enhanced the vocabulary of the students. In addition, their motivation, confidence and zeal of learning were also uplifted.

Furthermore, Quispe (2016) in his study randomly distributed 40 participants of grade three of "Americana Adventist school of Juliaca" in to experimental and control group. He used word games to teach vocabularies to the experimental group resultantly they showed improved performance.

Research Methodology

The nature of the research was quantitative. Quantitative research is suitable for the studies that aim to measure the relationship between two or more variables through different statistical procedures and tests (Creswell, 2012). There are different research designs, for this study, quasi experimental design was chosen. Creswell (2012) described quasi-experimental research as the non-random assignment of the participants to groups in order to study the effect of independent variable on the dependent variable. Researchers used quasi-experimental research because they did not receive permission for randomly dividing on class into experimental and control groups. Thus, this quasi-experimental research of non-randomized control group, pre-test post-test design. was adopted so that the already organized and arranged classes and grades of the school system might not be disturbed by the study (Ary et a l., 2010). The graphical representation of Non-randomized control group, pre-test post-test design is as under.

Group	Pre-test	Independent Variable	Post-test
E	Y1	x	Y2
C	Y1	___	Y2

Figure 1: Non-randomized control group, pre-test post-test design (Source: Ary et a l. (2010).

Sampling and Population

Through convenient sampling all the students of Government Girls High School Momin Abad, Quetta who were enrolled in 2018 were chosen as the population of the study. According to Creswell (2012), convenient sampling is a type of sampling in which participants are selected non randomly from the naturally formed groups.

Sample Size

The participants of the study were chosen non-randomly from sixty students of grade three (section B & C) each comprising thirty. The age of the participants was between 8 to 11 years. Their mother tongue was same i.e. Persian and they belonged to same socioeconomic background.

Research Tool and its Development

Teacher made test (pre-test and post-test) tool for the research was designed. Grade1-12, 2006, National Curriculum for English language was used for the development of the test. Standard two, "vocabulary" and competency four, "Formal and lexical aspects of language" were considered for making the questions of the test. Beside, teacher made test, the language games; Heads and Tails, Rail road spelling, This is how we Roll, Running Dictation, Commands, Alphabet Dash, Hang Man, and Opposites were also chosen on the basis of the selected Student Learning Outcomes (SLO).

Validity and Reliability of the Instrument

The same applied test was used in both pre-test and post-test examination so the reliability of the test could be proven. Moreover, the tests for both pre-test and post-test were sent to Senior Subject Specialist of English Language, Senior Research Officer of English Language, Subject Specialists of English language at BOC (the Bureau of Curriculum and Extension Centre) Baluchistan; Quetta for review and validation.

Process of Data Collection

Before the actual study, in the process of data collection, a Pre-test trail was given to the grade three (section B and C) with 60 students in

order to check their vocabulary level. The test was administered personally by the one of researchers. 30 minutes' time was allocated for the test. After pre-test, the distribution of the participants was done non-randomly in to control and experimental group. The customary method of teaching English vocabularies was applied on control group whereas; language games were used to teach vocabularies to the experimental group by the same teacher. After six weeks both control and experimental groups were given the post-test and the data was collected.

Analysis of the Data

The descriptive and inferential statistics were used for the analysis of the data. From the obtained marks of each group in each question, the Descriptive statistics was used find out the values of mean and standard deviations. On the other hand, in inferential statistics independent sample t-test was used for comparing the results of control and experimental group. In this way by comparing the groups before and after the experiment, the data was analysed.

Results of the Study

Comparability of Groups before the Initiation of Experiment

To find out the mean difference, a pre-test was conducted on students of both control and experimental groups on the basis of their total scores before the initiation of the experiment.

Table 1: *Descriptive Statistics before the Experiment.*

Groups	N	Mean	SD
Control Group	30	8.87	4.58
Experimental Group	30	8.80	5.27

Table 1 shows the descriptive statistics of both control and experimental group before the initiation of the experiment. 8.87 and 4.58 are the values of mean and standard deviation of control group whereas 8.80, and 5.27 are the values of mean and standard deviation of experimental group. The difference between the mean score of control group (M=8.87) and experimental group (M=8.80) is statistically and numerically significant.

Furthermore, an independent sample t-test was applied for comparing the significance of the mean of the groups prior the experiment for further clarification of obtained results.

Table 1
Summary of the Comparative Statistics before the Experiment.

Groups	N	Mean	t	df	Sig
Control Group	30	8.87			
			0.05	58	*0.96
Experimental Group	30	8.80			

* Level of Significance α=0.05

The difference between the mean of the groups was not found to be significant because the significant value (0.96) in the table 2 shows that the computed t value (58) =0.05 of independent sample t-test of both independent groups. Furthermore, it was not significant at 0.05 level of significance either. The not significant value depicts that before the initiation of experiment, both the control and experimental group were identically equivalent in vocabulary. Thus far, the equality of the groups was presumed and they were farther put in the process of experiment.

Compatibility of the Groups after the Experiment

Descriptive statistics were also applied after the experiment in post-test in order to find out the mean difference between the total scores of the control and experimental group.

Table 2
Descriptive Statistics after the Experiment.

Groups	N	Mean	SD
Control Group	30	11.63	5.43
Experimental Group	30	23.73	1.26

Table 3 shows the descriptive statistics of both control and experimental group after the experiment. 11.63 and 5.43 are the values of mean and standard deviation of control group whereas 23.73, and 1.26 are the values of mean and standard deviation of experimental group. It was further disclosed that mean value of control group (M=11.63) in

post-test was low and the Mean value of the experimental group (M=23.73) was much higher as compare to control group.

Furthermore, an independent sample t-test was applied too, for comparing the significance of the mean of the groups after the experiment.

Table 3
Summary of the Comparative Statistics after the Experiment

Groups	N	Mean	t	Df	Sig
Control Group	30	11.63			
			11.89	32.10	*0.00
Experimental Group	30	23.73			

*Level of Significance α=0.05

As the mean value of experimental group M=23.73 is significantly higher than that of control group M=11.63 in post-test. Hence, the difference between the mean of the groups is significant. The results affirmed that significant value (0.00) in the table 0.4 depicts that the computed t value (32.10) =11.89 of the independent sample t-test of the two independent groups is significant at 0.05 level of significance. It is further affirmed that as per post-test that as compare to the control group, the experimental group performed better. It is thus found that there is significant difference between the achievement scores of control and experimental group on post-test. Which provided significant evidence for the rejection of first null hypothesis Ho1.

Results and Discussions

From the per-test, it was found that that there was no significance difference between the scores of control and experimental group so they were at the same level of vocabulary. On the basis of descriptive and inferential statistics, it was found that there was not any significance difference between the scores of control and experimental group. This result was also aligned with the previous study of the researchers who in order to check the uniformity of the sample of their study put them in pre-test (Al masri & Al Najar, 2014; Kabiri & Ghafoori, 2015; Palashi, 2016).

The result of post-test was also aligned with the work of prior researchers who in order to find out the effectiveness of the games on students' achievement, applied post-test on the sample of their study

(Gagandeep, 2016; Mubaslat, 2012; Palashi, 2016). Similarly, by applying the descriptive and inferential statistics on students' post-test scores the result was drawn that, there was a significance difference between the scores of control and experimental group so they were not at the same level of vocabulary after post-test. These findings are also in line with previous research. For example, Al masri and Al Najar (2014) found the same results that using vocabulary games improves students achievement in vocabularies. Kabiri and Ghafoori (2015) results also supported the results of this study that students taught by games outperform those who are taught by traditional methods. Thus they concluded that using games support students at elementary stages of learning foreign language. The findings of the study are also supported by Alemi, (2010) and Dolati and Mikaili (2011) findings.

Thus, in this study, it was found that traditional methods of teaching English vocabularies are ineffective. On the other hand, if students are taught vocabularies by games at early grads they can take interest in learning and it may result in lasting learning. The great educationist and psychologists Piaget and Dewey's theories are the basics of game pedagogy. The main idea of John Dewey's theory is learning by doing which he accommodated with early grade school students. Games, storytelling, and observation were the main theme of Piaget's theory (Xiaoyu, 2016). In short, one cannot detach playing and learning in teaching children because by playing, children learn naturally and get developed socially, physically, emotionally and intellectually. Game pedagogy also assists students in learning in higher grades (Hang, 2017).

Conclusion

On the basis of the results, it is concluded that level of students' vocabulary was equivalent at the start of the experiment but after the experiment the students who were taught with the help of language games, their level of vocabulary enhanced whereas the students who were taught with customary method of teaching did not show improvement in their level of vocabulary.

The results of the study will assist the curriculum designers, textbook developers, teachers and students. By acknowledging the benefits and importance of language games, the curriculum designers can design an activity-based curriculum. The textbook developers can add language games in the text books. Moreover, teachers by applying the games in their language classes will actively engage students in learning and memorizing new words easily consequently students will not only enjoy

the learning process but will show enhanced improvement in their results.

This study was limited due to use of quasi experimental non-randomized control group, pre-test post-test design. The future researchers are suggested to use true experimental design for the generalizability of the results. The future researchers are also suggested to conduct the same study with larger sample size on students of middle and higher grades.

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