



Original Article

The Role of Mother Tongue and Its Impact on Learning English Grammar at Elementary Level: A Case Study of District Karak

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Abstract

The mother tongue plays a vital role in facilitating the understanding of English grammar, making it easier for students to grasp complex concepts. Its use in teaching can bridge linguistic gaps, leading to more effective language acquisition. Therefore, the current study investigates the role of the mother tongue (L1) and its impact on learning English grammar, particularly Tenses, at the elementary level in District Karak. The main objective was to examine how using the native language, Pashto, affects students' understanding of English grammar. The research was experimental, employing a pre-test and post-test equivalent-groups design. Two groups of students were formed: an experimental group, taught using a combination of the target language (English), national language, and mother tongue, and a control group, taught exclusively in English. Students were assigned to these groups based on random sampling, ensuring balanced placement. The findings revealed no significant difference in the pre-test and post-test results of the control group, while the experimental group showed notable improvement in their post-test scores. The study recommends incorporating the mother tongue in English grammar instruction at the elementary level and suggests similar investigations in girls' schools.

Keywords: Contrastive Analysis, English Language Teaching, First Language, Mother Tongue, Second Language Acquisition

INTRODUCTION

The debate over whether learner's native language be used in English language classrooms or not has been a controversial issue for years (Brown, 2014). The followers of the Direct Method did not favor using the native language (Pashto-L1). However, the constructive function of the native language remains recognized as a rich resource that, if utilized with good sense, can help English language learning enormously (Cook, 2001; Alrashidi & Phan, 2015). English is an International language. Here, learners take it as a bounden duty to learn it effectively and efficiently as it is not practical, so English Language teachers experience a continuous struggle between theory and practice (Al Dameg, 2011). Numerous theories of English instruction favor the use of learners' target language in all classroom activities, leading to denying the part of the mother tongue in the process of acquiring English grammar. On a more functional level, English language teachers in Pakistan often feel the learners need a clearer and more stress-free method of communication (Aina, 2020). This need can be satisfied through mutual dealings in Urdu. Now, the question exists: Where should educators draw a line? Either English should strictly be used in English grammar acquisition, or there should be a choice in which both the learner's mother tongue and English can be used simultaneously (Alam, et al., 2022). The problem at the moment is that teachers do not like the view of the English-only zone. They think that learners go through the process of fossilization while acquiring English grammar. Learners are learners, and so they keep silent at this stage. They need support from their mother tongue.

The area in which the mother tongue (Pashto-L1) is used in this study is teaching English grammar by English teachers. The native language of the learners can be effectively used in language classrooms (Atkinson, 1987). He favors its controlled utilization. As per his approach, this activity could be more communicative; it focuses on improving the precision of the newly learned structure. Professionals in English language teaching are aware of the role of the mother tongue. Nunan and Lamb (1996) assert that English language teachers find a prohibition of the native language to be practically impossible. Cook (2001) upholds the role of native language. He finds new parameters in this line of attack and is very optimistic about using his native language.

Objective of the study

The main objective of the study was:

- To examine the overall significance of the mother tongue in the learning process of English grammar.
- To examine the role of the mother tongue while teaching tenses in English.

Hypotheses

H1: Learning English grammar taught in monolingual teaching is the same as learning in the multilingual model.

H2: There is no significant difference between the aggregate results of the post-test control and post-test experimental group.

METHODOLOGY

The primary objective of this study was to investigate the influence of the mother tongue (L1) on the acquisition and comprehension of English grammar among elementary-level students in District Karak, Khyber Pakhtunkhwa (KPK), Pakistan. Specifically, the research aimed to assess how the use of the local language impacts students' ability to grasp key grammatical concepts in English. This study also sought to identify potential challenges that arise due to the linguistic differences between L1 and English and evaluate the effectiveness of existing instructional strategies in bridging the gap between the two languages. By focusing on elementary-level students, the study intended to provide insights into the foundational stages of English language learning and offer recommendations for enhancing grammar instruction that accommodates the linguistic background of the learners in this region.

Research Design

This study was an experimental research. The pre-test-post-test Equivalent-Groups Design was used. It was designed to look at the role of the native language (Pashto) and its impact on the performance and achievement gained by the students at the elementary level. Two equivalent groups were made, and a baseline test was administered. They were put into these groups based on the scores they got on the test. One group (experimental group) was taught in the target language, national language, and the mother tongue (L1) of the learners, and the other (control group) was taught only in the target language of the learners while teaching English grammar. The content taught comprised tenses only. Students were distributed based on a random sampling technique so that maximum care could be taken while putting them in the control group and experimental groups.

Reason for Using Experimental Research

The basic purpose of this research study was to investigate the role of mother tongue and its impact on learning English grammar. Two groups: the control and experimental groups, were formed for which pre-test and post-test equivalent group design was adopted. This design requires at least two groups. Both groups were administered a pre-test. Each group received a different treatment, and both groups were given post-test at the end of the study. Thus, experimental research was the best possible research method with pre-test and post-test equivalent groups design (Chang & Lin, 2019).

Procedure

For the experimental group, the teacher used the mother tongue (L1) as an additional tool to define and explain the terms and concepts. Here, the teacher related the basic points/terms/concepts in the student's target language, the national language, and the mother tongue. Using the mother tongue was the main tool while teaching the experimental group. This model is known as the multilingual model and is termed a better model (Cummins, 2016).

Execution of Plan

The duration of treatment was sixteen weeks. Four weeks were given for the present tense, four weeks were reserved for the past tense, four weeks were specified for the future tense, and four weeks were utilized for revising all tenses.

Participants

There were 60 grade 7 students. They were distributed in two different groups: the control group and

the experimental group. Both groups had 30 students each. The study's target population was students of District Karak's grade 7 only.

Sampling Procedure

As it was experimental research, two groups with 30 students each were formed. Their grouping took place based on a baseline test. The distribution of the students was such that high-score achievers, average-score achievers, and low-score achievers were equally placed in each group. A random sampling technique was followed while putting the students into groups. The 7th class was selected as a sufficient number of students was available. It was the school where the researcher worked, so it was easily accessible for the purpose.

Research Instrument

The researcher prepared a pre-test as a baseline test in English grammar to determine the children's present learning level. To determine content validity, fifteen English teachers were consulted. Their feedback was properly incorporated into the baseline test. In the pilot study, reliability was determined through the split-half method. The reliability coefficient was 0.81. Data was interpreted in light of the objectives of the study. SPSS version 20 was used. A paired Samples t-test was used for the pre-test and post-test of the control group as well as the pre-test and post-test of the experimental group as it is the most feasible test for comparing the two groups where participants are the same. A repeated-measures t-test of Independence was used to check the impact of treatment on the data analysis of the post-test (control group) and post-test (experimental group). In light of the pre-test, Equivalent Match Group Designs was formed. The means of these tests were recorded. After the treatment was given, a post-test was offered. Now, the means of the whole process were found, and a comparison of the pre-test and post-test was made.

The t-Statistic for Independent-Measures Research Design

The main objective of the Independent-measures study is to assess the mean variance of the two groups or between the two treated situations (Gravetter & Wallnau, 2011). If subscripts are used, the two groups would be differentiated μ_1 with the mean for group number 1 and with the mean μ_2 for group number 2. Just $\mu_1 - \mu_2$ is the difference between the means. The null hypothesis never offers any change in the situation. Symbolically, the null hypothesis for the independent-measures test would be $H_0: \mu_1 - \mu_2 = 0$.

RESULTS & FINDINGS

Comparison between Pre-Test and Post-Test (Control group)

Table 1

Tenses Paired sample statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pre-Test Control Tenses	9.86	30	2.096	0.382
Post Test Control Tenses	10.1	30	1.900	0.346

The above Table 1 determined the paired wise summary of descriptive statistics. The pre-test and Post-test control group means were 9.86 and 10.1 respectively which reflected a smaller change. The amount of variation was reduced among post-test control compared to pre-test control group.

Table 2
Summary of Pre-Test and Post-Test control group of Tenses

Type of Test	Group score	No. of Students`	%
Pre-Test	1-05	00	00
	06-10	19	63.3
	11-15	11	36.7
	16-20	0	00
	21-25	00	00
Post-Test	1-05	00	00
	06-10	19	63.3
	11-15	10	33.4
	16-20	01	3.3
	21-25	00	00

The score was further distributed among different groups for the purpose of close comparison of pre-test and post-test control groups. The groups 1-5 were of no use for the purpose of comparative study. Groups 6-10 showed identical observations, while groups 11-15 and 16-20 were also contrasted. The score was additionally disseminated among various gatherings, with the end goal of achieving a closer relation between pre-test and post-test control gatherings in terms of percentage.

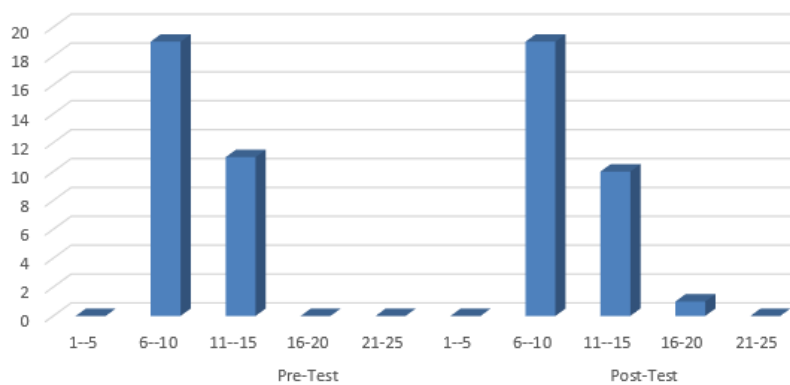


Fig. 1. Comparison of Tenses Score between pre-test and post-test control group

Figure 1 reflects the graphic presentation of the marks scored by students in the portion of Tenses in the Pre-test control group and Post-test control group.

Table 3
Pared Samples T-Test for Control Pre-Test and Post-Test (Tenses)

	Mean	Std. D	SE Mean	LCI	UCI	t	df	Sig.
Pre Control Tenses								
Post Control Tenses	-0.266	0.784	0.143	-0.559	0.026	-1.86	29	0.073

The inferential measurement t-test was utilized to break down the match as the means were of a single gathering. The significance was noticed as $0.073 > 0.05$, showing that no significant difference exists. The study in the pre-test and post-test control groups achieved a similar score in tenses (Table 3).

Table 4
Tenses Score Group Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Post-Test Control	30	10.13	1.995	0.364
Post-Test Experimental	30	19.06	1.910	0.348

The table 4 shows the mean score of group statistics between Pre-test control group and Post-test experimental group in the part of tenses after the treatment given to both the understudies group. The mean score of the Post-test control group is 10.13 while that of the Post-test experimental group stands at 19.06.

Table 5

Summary of Post-test Control and Post-test Experimental group of Tenses

Type of Test	Group score	No. of Students	%
Post-test Control	1-05	00	00
	06-10	19	63.4
	11-15	10	33.3
	16-20	01	3.3
	21-25	00	00
Post-Test Experimental	1-05	00	00
	06-10	00	00
	11-15	02	6.6
	16-20	21	70
	21-25	07	23.4

Table 5 offers the scores of the students described in different group scores. Group scores 1-5 present no student in the Post-test control group as well as in the Post-test experimental group. The post-test control group, a group score of 6-10, reflects 19 students with 63.4% group, while the group score in the Post-test experimental group has no students with 0%. In group scores of 11-15 in the Post-test control group, ten students appear with 33.3%, and in group scores of 11-15 in the Post-test experimental group, there are only two students with 6.6%. A post-test control group with group scores 16-20, only one student stands at 3.3%, while in the same group, in the Post-test control group, there were 21 students with a huge percentage of 70. The post-test control group shows no student in the group score 21-25, where only English was used as a medium of instruction, while in the group score 21-25 in the Post-test experimental group, seven students thrived with a significant percentage of 23.4.

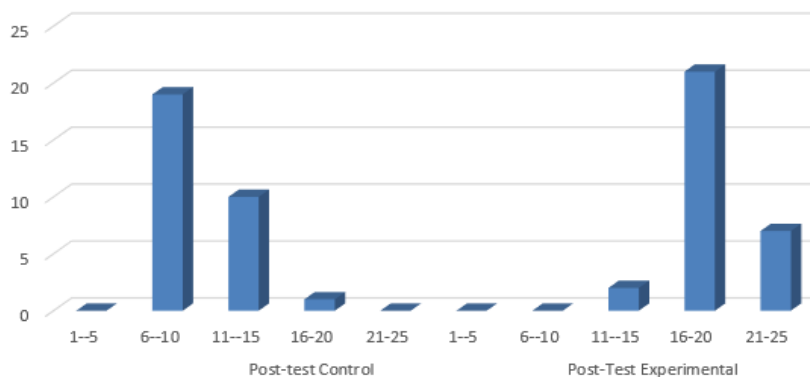


Fig. 2. Comparison between post-control and post-experimental (Tenses)

This Figure is the manifestation of the score of the students achieved in Tense after the given treatment in the Post-test control group and the Post-test experimental group.

Table 6

Independence Samples T-Test for posttest control and posttest Experimental Test (Tenses)

	F	Sig.	t	df	Sig	Mean Difference	LCI	UCI
Equal var assumed	0.21	0.647	-17.71	58	0.000	-8.933	-9.942	-7.923
Equal var not assumed			-17.71	57.891	0.000	-8.933	-9.943	-7.923

The above table produces the independent samples t-Test result for Post-test control group and Post-test experimental group in the perception of tenses. This table resonate the p value is smaller than 0.05

consummating/ wrapping up that significant difference flourish/prosper between the Post-test control group and Post-test experimental group in the portion of tenses taught. There was no significant difference in the aggregate result of pre and post-test results of the control group. A significant difference was found between the aggregate results of the post-test control group and the post-test experimental group.

CONCLUSIONS & DISCUSSION

Although there was a difference between the means of the pre-test and post-test control groups in tenses, the mean difference was very small. The t-test showed that the difference was not significant. On the other hand, there was a major difference between the means of pre-test and post-test of the experimental group in the concepts of Tenses. The t-test results confirmed that the difference was significant. The t-test showed that the difference between the pre and post-test of the control group was insignificant. At the same time, the mean difference in the aggregate between the pre-test and post-test experimental groups was large. The t-test showed that the difference in the aggregate between the pre-test and post-test of the experimental group was significant. It showed that the use of the mother tongue in teaching grammar was effective, as students showed high results in their post-test. This confirmed that the use of native language has a positive effect on students' learning of Tenses in English. The result supports only the positive aspect of native language use in learning English. There is a difference in the research methodology of the present research study and that of a research study conducted by Dmour (2015). Hence, the other aspect of the use of the mother tongue was not the focus of the current research study.

The results of this study upheld the opinion of the teachers that students can learn in a better way by utilizing their mother tongue in teaching grammar, as reported by Dmour (2015). By comparing the results of the post-test control group and post-test experimental group, it was confirmed that there was a significant difference between the results of the post-test control group and the post-test experimental group in the concept of Tenses. Similarly, there was a significant difference in the aggregate results between the post-test control group and the post-test experimental group. The results revealed that students of the experimental group outclassed the students of the control group in the concept of Tenses taught to both groups. The findings of this research study were in line with and supported the results of the experimental research study conducted by Damra and Al Qudah, (2012). However, the mother tongue used by Damra and Al Qudah, (2012) in their research was Arabic, while in this research, the mother tongue incorporated was Pashto. The findings of this research reflected that the utilization of the mother tongue in teaching of Tenses has a positive impact on students learning. While it favored the ideas of Brown (2014) that first language that is mother tongue is an absorbing factor which helps in increasing students' learning in the second language.

Recommendations

On the basis findings and conclusion of this study the following recommendations are offered to the relevant stake holders in each area of the education system.

- It is recommended for the policy makers to make sure the use of mother tongue as priority in teaching Tenses in English at elementary level
- It is recommended that curriculum developers suggest appropriate use of the mother tongue when teaching English tenses at the elementary level
- A similar research study may be conducted on female students at elementary as well

Competing Interest

The authors had no competing interests.

References

- Aina, E. O. (2020). *Codeswitching and identity among Yoruba-English bilinguals in Canada* (Doctoral dissertation, Memorial University of Newfoundland).
<https://doi.org/10.48336/05nd-ty39>
- Al Dameg, K. A. (2011). The suitable age for learning foreign languages in public education. *Damascus University Journal*, 27(1-2), 753-811.
- Alam, M. R., Ansarey, D., Abdul Halim, H., Rana, M. M., Milon, M. R. K., & Mitu, R. K. (2022). Exploring Bangladeshi university students' willingness to communicate (WTC) in English classes through a qualitative study. *Asian-Pacific Journal of Second and Foreign Language Education*, 7(1), 2.
<https://doi.org/10.1186/s40862-022-00129-6>
- Alrashidi, O., & Phan, H. (2015). Education Context and English Teaching and Learning in the Kingdom of Saudi Arabia: An Overview. *English Language Teaching*, 8(5), 33-44.
- Atkinson, D. (1987). The mother tongue in the classroom: a neglected resource?. *ELT journal*, 41(4), 241-247.
<https://doi.org/10.1093/elt/41.4.241>
- Brown, H. D. (2014). *Principles of language learning and teaching: A course in second language acquisition*. Pearson.
- Chang, M. M., & Lin, M. C. (2019). Experimental study on strategy-oriented web-based English instruction for EFL students. *Journal of Educational Computing Research*, 56(8), 1238-1257.
<https://doi.org/10.1177/0735633117739410>
- Cook, V. (2001). Using the first language in the classroom. *Canadian Modern Language Review*, 57(3), 402-423.
<https://doi.org/10.3138/cmlr.57.3.402>
- Cummins, J. (2016). Reflections on Cummins (1980), "The Cross-Lingual Dimensions of Language Proficiency: Implications for Bilingual Education and the Optimal Age Issue". *Tesol Quarterly*, 50(4), 940-944.
<https://www.jstor.org/stable/44984725>
- Damra, H. M., & Al Qudah, M. (2012). The effect of using native language on grammar achievement and attitudes toward learning of basic stages EFL students in Jordan. *International Journal of Business and Social Science*, 3(1).
- Dmour, A. (2015). The Effect of Using Arabic Language for Teaching English as a Foreign Language at Elementary Stage Schools in Jordan. *Journal of Education and Practice*, 6(35), 93-97.
- Gravetter, F. J., & Wallnau, L. B. (2011). *Essentials of statistics for the behavioral sciences*. Wadsworth Cengage Learning.
- Nunan, D., & Lamb, C. (1996). *The Self-Directed Teacher: Managing the Learning Process*. Cambridge University Press.