



A Comparative Study of the Impact of First Language Literacy on Acquisition of English Phrases among Illiterate, Low-Literate and Literate Adult Learners in Iran

Fateme Pirbeig*

MA, Department of Foreign Languages, Kharazmi University, Tehran, Iran.

Abstract

The process of foreign language syntactic development regarding learners' L1 literacy level is different among adult learners. Many studies have shown that illiterate and low-literate learners follow the same path in the L2 morphosyntax development despite their L1 literacy level. However, little research has been carried out to focus on differences in the new language literacy development among learners with varying first language proficiency. Therefore, the current study was carried out to investigate the differences in learning English adjectival and prepositional phrases among three Kurdish adult groups of literate, low-literate, and illiterate learners in one term. Additionally, it probed the major difficulties they faced through the English phrase acquisition process. Mixed methods were used for data collection including observations of the classes supplemented by audio recording and English phrase tests. Through the application of three tests of recognition, matching, and multiple-choice type, the outcome knowledge of adjectival and prepositional phrases was assessed and compared among groups. The obtained data were analyzed through the Kruskal-Wallis test. Some tangible results were detected from tests that did not ascribe the differences in learning English absolutely to background schooling and literacy. In fact, they showed that there were significant differences among groups in matching and multiple-choice type post-tests, while there were no considerable differences in recognition-type post-test. Furthermore, results also revealed that illiterate and low-literate learners encountered further complicated difficulties and made an unusual combination of pronunciation and grammatical errors in their production.

Keywords: The literacy level, the adjectival and prepositional phrase learning, the differences in the phrase acquisition, learning difficulties.

* *Corresponding author:* Department of Foreign Languages, Faculty of Literature and Humanities, Kharazmi University, Tehran, Iran. Email address: fatemepirbeig@gmail.com

1. Introduction

Acquisition of English for those learners who do not have a chance to learn in a formal setting like school and now acquire literacy in a language other than their mother tongue in adulthood would be very challenging (Bigelow & Vinogradov, 2011). Most research on literacy acquisition has centered on adults and children in their native language, rather than on the acquiring literacy through the second language by adults (Bigelow & Schwarz, 2010). Some results of recent research on second language acquisition by illiterate and low-literate learners were emerged in a sequence of conferences. They specifically addressed a population of Low-educated Second Language Learners and Literacy Acquisition (LESLLA) in the Netherlands, the US, the UK, and Belgium. Empirical findings of these conferences pointed to the fact that illiteracy hindered the required ability for cognitive processing. For example, Kurvers and Van de Craats (2007) realized that learners with low literacy or no literacy encountered significant problems in digit-span tasks and made unusual mistakes. Furthermore, since learning alphabetic scripts in a second language demanded metalinguistic strategies, it proved to be highly challenging for learners without L1 literacy, as Young-Scholten (2013) asserted. Additionally, recent research on word recognition skills in foreign language learning by Kurvers (2007) argued that this skill as one of the underlying skills to be generated by beginners was practically different for non-native learners. Thus, this caused learners with no literacy to become confused in corresponding visual clues with meaning. Incidentally, Naeb and Yong-Scholton (2010) proposed that teachers should make learning easier for illiterate adult learners by employing techniques used for the development of phonological competence in preschool children. L2 literacy was believed by August and Shanahan (2010) to be, in one way or another, like first language literacy notably in word and text levels of the language. Yet, as indicated by Ediger (2006), there was a significant difference between adult literacy learners whose first language was English and literacy learners of English whose first language was other than English. Besides, learners who are non-literate or do not have enough formal educational experience may find it challenging to catch on with grammatical structure understanding or production in a new language. As referred by Wall (2017), recent L2 literacy research has emphasized the investigation of emergent writing and reading practice of LESLLA and stages of development (Kuvers & Ketelaars, 2010) and the crucial influence of L1 literacy on L2 oral proficiency (Craatts et al., 2013). Tarone et al. (2007) suggested that learning "some more complex syntactic structure may benefit from or even require a base level of alphabetic print literacy"

(p.79). Therefore, the current study aimed to explore the production of grammatical structures, like prepositional and adjectival phrases by adult Iranian learners of English without L1 literacy, with low literacy, and with literacy in separated groups and distinguish between their learning. In addition, this study was carried out to investigate the major obstacles to the acquisition of English phrases by each of the three groups and to see if the problems were linked to their level of L1 literacy.

2. Literature Review

2.1. Importance of Literacy in Language Processing

Studies conducted in cognitive psychology affirmed that people with no or little literacy encountered considerable difficulty in learning to read or write in adulthood. Reis and Castro-Caldas (1997) investigated the act of repetition of two lists of common and pseudo-words by 20 Portuguese illiterate and ten literate women. The participants in this study had the same cultural backgrounds and intelligence. Yet, the illiterate group of learners could not repeat the words effortlessly, specifically the uncommon ones. In another study, by using a *Positron Emission Topography Scan*, Castro-Caldas (1998) examined the differences between the brain activity of literate and illiterate learners while they were restating meaningless words. Generally, it was revealed that the level of literacy did not influence the brain through the process of learners' repetition (Reis & Castro-Caldas, 1997). However, in later studies, Petersson et al. (2000) indicated that the number of levels and perceptions that the brain attended to in parallel with different activities and practices were affected by the literacy level. Furthermore, through observation, Reis et al. (1994) argued the significant influence of educational level on the ability to name the photographs and line drawing of the objects. In addition, they realized that color and sense of reality in the photos would modify the speed of recognition and naming of the words by illiterate ones. As mentioned and proved throughout several studies, illiterate people were considerably limited in performing a variety of visual-motor tasks, drawing figures, and even building stick figures from a typical model of an image (Ardila et al., 1989; Matute et al., 2000). On the other hand, in their investigation of peoples' capability in visual-spatial skills, Bramão et al. (2007) found that in responding to images that appeared on the left side of the screen, literate people replied significantly faster, while illiterate ones responded neither to those on the left side nor those on the right side.

Ediger (2006) found a marked difference in her research between speakers of English and literacy learners of English whose first language was other than English. Ediger (2006) asserted that native

speakers developed reading and writing skills with a good command of oral tacit. But, ESL literacy learners faced with lack of vocabulary and oral language knowledge that undermined their skills as English learners. Therefore, Ediger (2006) showed that L1 literacy could be regarded as the practical means for obtaining optimal literacy in a new language. She also recommended providing literacy learners with an opportunity to spend time on L1 reading and writing. In addition, observing them could guide teachers in planning adaptable instruction. The existing research shed light on the fact that teachers better appreciate learners' first language culture and previous acquaintance to pave the way for the progress toward L2 literacy accomplishment.

2.2. Literacy and Second Language Acquisition

In the second language learning process, learners with higher first language reading ability perform better in morphosyntax recognition and production. Dellatolas et al. (2003) inquired whether the degree of literacy had an influence on verbal and visual memory and phonological skill or not. Therefore, they conducted relevant research; the participants in this study were 97 illiterate adults and 41 children. To demonstrate their degree of literacy, the authors gave learners tasks in which they were required to read short words and recognize numbers and letters in capital forms. Then, learners were put into *reader* and *nonreader* groups depending on their performance in the pre-specified tests. A couple of tests including real word and fabricated words repetition, phonological fluency, rhythm recognition, deletion of first phonemes, and memory span tests were used. This study roughly replicated the finding of the previous research. Thereupon, Dellatolas et al. (2003) ascertained that literacy paved the way for successful performance in tasks of phonological fluency and phoneme omissions. Nevertheless, repetition of short words was effortless for illiterate learners, repetition of long fabricated words was a challenging job. Bigelow et al. (2006) found that there was a connection between literacy and processing oral recasts. The researchers adopted an oral proficiency test aiming to elicit some information from the learners by asking questions and observing their mistakes in their investigation of eight adult participants from Somalia in two groups with two distinct literacy levels. In addition to observation of conversational dialogue, Bigelow et al. (2006) used story completion and a spot-difference task for the purpose of data collection. In recalling the questions correctly, the group of learners with higher literacy was more successful.

Pettitt and Tarone (2015) also observed the process of learning the alphabet system and language structure acquisition necessary to improve English for six months. The data were gathered from a 29-year-old low-educated immigrant through the adoption of eclectic methods of observation, interview, and analysis of existing relevant documents. The findings mirrored the outcomes of previous studies and suggested that rather than teaching alphabet letters, teachers had to familiarize learners with phonemes which stood for graphemes. Coupled with this, Pettitt and Tarone (2015) drew other conflicting conclusions, such as knowing alphabet letters did not have any substantial benefits for decoding skills, and while oral production was enhanced with progress in alphabetic literacy, the pragmatic capacity did not change.

Recently, Moss (2016) examined the connection between literacy and the progress of morpho-syntax and gathered data from four low-literate learners with a Kurdish language as the mother tongue from Iraq. The outcome of this study indicated that literacy level had a strong correlation with progress in morpho-syntactic competence. The learners with acceptable literacy levels and sufficient reading ability proved to have more morpho-syntactic competence, as was conveyed by Moss (2016). In another investigation that focused on the role of L1 and L2 in the organization of narratives, Allami and Ramezani (2021) explored the concept of first language transferring in story telling among EFL learners with various proficiency. For that, 125 recorded narratives were analyzed. The results showed that more than other possible factors, first language and culture are influential in constructing narratives.

The claim that the process of L2 morpho-syntactic acquisition was almost equal among learners with various mother tongues, background knowledge of English, and formal education encouraged Young-Scholten and Vainikka (2018) to undertake longitudinal research. They explored the order of grammatical elements learned in Arabic, Somali, and Urdu by elementary English speakers who had dissimilar literacy levels and exposure to the English language. Based on the reports, it was not evident whether the immigrants' development of SL was bound to the level of exposure to the target language or the literacy knowledge. Therefore, the acquisition of verb phrase (VP) projection's word order, agreement of subject and verb, the negation of the sentences, and formation of regular past tense by learners were explored by assigning some particular tasks like completion of the sentences with VP and storytelling and comparison of differing pictures. To trace the development of the learner's trajectory, Young-Scholten and Vainikka (2018) made use of organic grammar theory, which was first introduced in the project of Lexlern (1990). The underlying implication of this theory suggested that the primary development of morphosyntax was based on native language word order that contributed to the

elimination of functional syntax. The findings showed that in the process of imperfectly approximating target language knowledge and differently performing in major tasks, various over-application of *-ing* and *-s* as suffixes were noticeable by low-literate learners (Young-Scholten and Vainikka, 2018). Limon and Young-Scholten (2015) also asserted that illiterate learners face a *double burden* in L2 acquisition.

The limited literature on the acquisition of language-related skills by low-literate and non-literate learners has generally failed to achieve the desired outcomes (Bigelow & Schwarz, 2010) or duplicated the results gained by researching illiterate first-language learners. Since next to little is known about the second language production or comprehension by illiterate adult learners, researchers like Dabrowska (2012) represented the need for carrying out comprehensive studies to conceptualize the learning process of illiterate learners. Besides, As implied by Pettitt and Tarone (2015), “an important agenda for future SLA study is to pinpoint the syntactic structures orally used by learners at the beginning stages of print literacy and ways these learners’ morphology and syntax may become more complex as print literacy increase” (p.34). Therefore, the current study aimed to explore the production of grammatical structures, like prepositional and adjectival phrases by adult Iranian learners of English without L1 literacy, with low literacy, and with literacy in separated groups and distinguish between their learning. In addition, this study was carried out to investigate the major obstacles to the acquisition of English phrases by each of the three groups and to see if the problems were linked to their level of L1 literacy.

1. Are there any significant differences among the three groups of L2 learners with varying levels of L1 literacy (i.e., literate, low-literate, and illiterate) in their acquisition of English adjectival and prepositional phrases?
2. What are the main difficulties experienced by the three groups in learning the adjectival and prepositional phrases? How do the problems differ according to the English language learners’ L1 literacy level?

H₀1. There are no significant differences among the three groups of L2 learners with varying levels of L1 literacy (i.e., literate, low-literate, and illiterate) in their acquisition of English adjectival and prepositional phrases.

3. Method

3.1. Design

To have a precise understanding of the learning outcome of English phrases by illiterate, low-literate, and literate groups of learners and the difficulties these groups encountered in the acquisition, a quasi-experimental design was used. Notably, to have a flexible framework for the investigation of the difficulties in phrasal structure learning between learners with no literacy, low literacy, and with literacy, the researcher gathered some parts of the data qualitatively. In other words, the study was a relatively longitudinal examination resting on both qualitative and quantitative data. In order to develop a greater understanding of learners' difficulties, observation was employed. Besides, for ascertaining their level of literacy, the groups were pre-assessed prior to initiation of the classes. After pre-teaching alphabets and working on the instruction of the adjectival and prepositional phrases, the researcher post-assessed their knowledge of aforesaid phrases.

3.2. Participants

To figure out how first language literacy could influence the acquisition of adjectival and prepositional phrases, three distinct groups with dissimilar levels of literacy were deliberately selected. For this purpose, both illiterate and low-literate participants were selected from the same community of people in one of the villages in Qazvin, where adequate numbers of men and women with heterogeneous levels of literacy are living. Additionally, literate adult participants were selected from the same community. The recruited literate participants were some adults who had received their high school diploma in recent years, although the selected cases did not necessarily study in the same major at school. Indeed, employing criterion sampling and based on the following pertinent characteristics, the researcher selected the participants: illiterate, low-literate, and literate adults whose ages were within the range of 25 to 35, were willing to acquire a foreign language and had Kurdish as their mother tongue. On the whole, the intended cases of the current research were divided into three groups of six involving illiterate, low-literate, and literate participants. As signified in the Tables (3.1, 3.2, and 3.3), participants' degree, years of schooling, and their school major, mother tongue, and further languages learned by them are separately displayed.

Table 3.1*Background Information of Illiterate Participants*

Name	Mother tongue	Years of schooling	Major& degree	Further languages
Fatolah	Kurdish-Lurish	No schooling	Diploma	--
Reyhane	Kurdish	No schooling	No degree	--
Abbas	Kurdish	No schooling	No degree	--
Afsane	Kurdish	No schooling	No degree	--
Rasool	Kurdish	One year	Diploma	--
Mehdi	Kurdish	No schooling	No degree	--

Table 3.2*Background Information of Low Literate Participants*

Name	Mother tongue	Years of schooling	Major& degree	Further languages
Soraya	Kurdish	7 years	No major Interrupted guidance school	--
Soodabeh	Kurdish	6 years	Primary school	--
Zarbanoo	Kurdish	5 years	Primary school	--
Elahe	Kurdish	9 years	Guidance school	Turkish
Fereshteh	Kurdish-Mazani	5 years	Primary school	--
Mahin	Kurdish-Qazvini	4 years	Interrupted primary school	--

Table 3.3*Background Information of Literate Participants*

Name	Mother tongue	Years of schooling	Major& degree	Further languages
Nasim	Kurdish	12	Accountancy Diploma	--
Esmail	Kurdish-Mazani	13	Human science Diploma	--
Aboozar	Kurdish	12	Cartography Diploma	--
Hossein	Kurdish	12	IT Diploma	--
Hassan	Kurdish	12	Cartography Diploma	--
Parisa	Kurdish	12	Accountancy Diploma	--

*3.3. Instrumentations**3.3.1. NLLSD (Native Language Literacy Screening Device)*

NLLDS was applied at the beginning of the classes in an attempt to check and ensure the literacy level of the learners in separate groups. To demonstrate, the learners' Farsi and English literacy levels were examined by exploiting the Native Language Literacy Screening Device (Hudson River Center for Program Development, 1999). It was presupposed that the outcomes of the tests could somehow signify the participants' levels of ease with writing and reading skills, hence helpful for the aim of study. Farsi and English NLLDS involved four main parts. In the first part, the students were required to write some simple personal information (e.g, the date, name, age, place of living, among others). In the next part, some other related personal questions (e.g, what are your favorite things to do, what are your favorite foods, and what are your plans for the future) were included in the test. After responding to the first two sections successfully, participants were asked to read two short and simple narratives. Then, it was

continued with the task of writing short paragraphs like narratives. Finally, learners' responses were scored on Farsi and English literacy tests independently then a mean score was used as an outcome measure of each group's literacy. Each correct answer to the fifteen questions had one score. (Appendix A)

3.3.2. Observation

As a qualitative method, the observation of the classes was conducted to develop a better understanding of learning problems experienced by groups of literate, illiterate, and low-literate learners and how they differ in problematic issues of phrase learning. During the initial observations, some information was also collected about alphabet acquisition from groups. The observation of the classrooms was enriched by audio-recording the classes throughout this project. This qualitative data collection was focused on recording learners' participation, oral production, and within-group interaction in the development of the knowledge of the target language components of the research, adjectival and prepositional phrases with prior notice to learning alphabets in this process. To transcribe and analyze the observational data for each class, the researcher specifically adopted the COLT observation scheme developed by Spada and Frohlich (1995). Accordingly, the important aspects of the observation are addressed in the following part:

1. Verbal and Non-Verbal Behavior of the Learners: Verbal and non-verbal parts of learners' behavior like what is spoken, the way they recognized the given meaning of words and structures, the gesture they used, interpersonal relationships, and individual differences which influenced learning were concentrated on.

2. Instructional Emphasis Variables: They are as follows:

- Alphabets: letters, sounds, and examples
- Adjective phrases: adjective, (article) + adjective + noun
- Prepositional phrases: prepositions of time and place, preposition + (article) + noun

3. Common Errors: In the process of developing the knowledge of English phrases, the significant errors that occurred in learners' production were identified in each group. In other words, to see how groups vary from each other, the errors in their production of adjective and prepositional phrases were concentrated on:

- Grammar errors: mistakes in making nouns plural and using true articles.
- Pronunciation errors: mistakes in pronouncing the words and phrases.

3.3.3. Language Acquisition Assessment

The acquired phrasal structures were assessed through three tasks: matching, recognition, and multiple-choice type post-tests (Appendix B). These tasks were developed and adjusted depending on the investigated tasks appropriate for teaching reading to pre-literate learners in a study by Marrapodi (2013).

1. Recognition Type Post-Test: To define learners' achievement in the acquisition of adjectival phrases, learners were given a test that involved 12 adjectives phrases and the purpose was to group the adjectives according to their categories (age, size, and color). The test which was based on the common content of the beginners' literacy programs in use. The groups were expected to sort the adjectives read to them by giving a particular number to their distinctive category: number one for age, two for size, three for colors, and four for origins.

2. Matching Type Post-Test: This test simply consisted of ten adjective phrases on the left-side which required to be matched accurately with the opposite adjective phrases on the right side. These ten adjective phrases were presented with larger font-size and pictures to become easier to process. On the other hand, the alternatives on the right side were read out to groups for each adjective phrase on the left-side every time.

3. Multiple-Choice Type Post-Test: This specific test which was used for the assessment of English prepositional phrases included eight items. For that, the eight sentences were read aloud to each group of learners, and they selected the right preposition of the place among two options provided for them within the sentences, in accordance with the pictures.

3.4. Data Collection

This study was conducted in one term with literate, low-literate, and illiterate learners (each in a separate group) who were the participants of this English grammar course. Descriptively, to make sense of participants' literacy in Farsi and English, the researcher employed the Native Language Literacy Device (Hudson River center for program development, 1999). Then, each of the three distinctive classes was observed and audio-recorded for nearly seven sessions. The observational data were obtained in the form

of field notes. To collect extensive and comprehensive information, the researcher also supplemented the field notes with another data collection strategy, audio recording. To enhance the quality of the recording, the audio-recorder was put in the middle of the class near the students and the recording continued for about one hour. Later on, the results of the classes' observations were transcribed and analyzed rigorously. The learning results of the groups were also reviewed using the three aforementioned tests.

3.5. Data Analysis

To analyze collected data, some initial important steps were taken. Since NLLSD tests were employed for the final placement of the learners, accordingly the test was scored separately in each group. Then, all the outcome scores in every group were manually recorded and shown in a statistical table. Moreover, due to the nature of the study and because non-parametric statistics do not necessitate data having quite normal distribution (Lei & Lomax, 2005), it was decided to use one of the non-parametric tests, Kruskal Wallis to analyze the result of recognition, matching, and multiple-choice tests and to see underlying differences among groups along with a comparative analysis of the data descriptively.

For observation, the researcher employed a four-step data analysis, which was also utilized by Kang and Cheng (2014). In the first step, the deduced data from observation and recording were grown as vignettes and were put into a table in which the duration of the class, the context of the lesson, the main activities, and inferred difficulties for comparison of learning by these three different literacy level groups were demonstrated. Thereafter, based on the common errors in learners' production, the perceived difficulties in the acquisition of (intended components) English phrases were pre-coded, coded, and categorized. According to that, it was found that groups similarly came across difficulties in pronunciation and grammar levels in addition to overgeneralization.

4. Results

4.1. English Phrase Acquisition and L1 Literacy

4.1.1. Pre-test and Post-test

The researcher conducted NLLSD (native language literacy screening device) in both Farsi and English in the first session of the classes. Table 4.1 gives a basic outline of the groups' performance in the

aforementioned tests: while the English pre-test mean scores were 5.16, 0.83, and 0.00, the Farsi pre-test mean scores were 12.66, 10.16, and 0.50 for literate, low-literate and illiterate groups respectively.

Table 4.1

Descriptive Statistics of the Pre-Test Result

Test	Group	Number	Minimum	Maximum	Mean	SD
English pre-test	Literate	6	3	7	5.16	1.47
	Low-literate	6	0	2	.83	.75
	Illiterate	6	0	0	.00	.00
	Total	18	0	7	2.00	2.49
Farsi Pre-test	Literate	6	12	13	12.66	.51
	Low-literate	6	8	12	10.16	1.47
	Illiterate	6	0	2	.50	.83
	Total	18	0	13	7.77	5.48

The results given in Table 4.2 showed that a statistically significant difference between literate, low-literate, and illiterate groups of learners ($H(2) = 14.37, P = 0.001$) existed in the English knowledge. Similarly, the ultimate outcome of the Farsi knowledge pre-test shown in Table 4.3, pointed out the differences among illiterate, low literate, and literate participants ($H(2) = 15.13, P = 0.001$).

The Kruskal-Wallis test outcome of the adjective matching, as shown in Table 4.4, indicated a mean rank of 5, 10.58, and 12.92 for illiterate, low-literate, and literate groups, respectively. The Kruskal-Wallis test ($H(2) = 7.160, P < 0.05$) showed a major difference among the groups in the ability to match the adjectives. Table 6.4 also indicated that first language literacy matters: the average score of this test is the lowest for the group with no literacy and the highest for literate participants. Illiterate learners did not come close to finishing the test, underscoring the effect of level of L1 proficiency on skills of information processing. On the other hand, as the analysis of the variance revealed that on this test, the

three groups differed fundamentally, a post hoc was conducted to track the pairwise comparisons. The result of the post-hoc test demonstrated that there was a statistically significant difference between illiterate and literate learners' achieved scores ($p < 0.05$). However, the difference between illiterate and low-literate learners or literate and low-literate ones was minor.

Table 4.2

The Outcome of Kruskal-Wallis Test for English Pre-Test Scores

Group		N	Mean Rank	Kruskal-Wallis H	DF	Sig.
English pretest	Literate	6	15.50	14.37	2	.001
	Low-literate	6	8.50			
	Illiterate	6	4.50			
	Total	18				

Table 4.3

The Outcome of Kruskal-Wallis Test for Farsi Pre-Test Scores

Class		N	Mean Rank	Kruskal-Wallis H	DF	Sig.
Farsi pre-test	Literate	6	15.33	15.13	2	.001
	low-literate	6	9.67			
	Illiterate	6	3.50			
	Total	18				

Note: $*p < 0.05$, $p > 0.05$.

Table 4.4*The Result of the Kruskal-Wallis Test for the Matching Type Post-Test*

Group		N	Mean Rank	Kruskal-Wallis H	DF	Sig.
Matching test	Literate	6	12.92	7.160	2	.028
	low-literate	6	10.58			
	Illiterate	6	5.00			
	Total	18				

Table 4.5*Pairwise Comparisons of Groups' Score in the Matching Type Post-Test*

Sample1-sample2	Test Statistic	SD. Error	SD. Test Statistic	Sig.	Adjective. Sig.
Illiterate-literate	7.917	3.041	2.604	.009	.028
Illiterate-low-literate	5.583	3.041	1.836	.066	.199
Low-literate-literate	2.333	3.041	.767	.443	1.000

The results of the recognition test shown in Table 4.6 displayed the mean rank of 7.92, 8.67, and 11.92 for illiterate, low literate, and literate groups respectively. So, this post-test results suggested that groups' performance is not statistically different ($H(2) = 1.960$, $P > 0.05$), and the null hypothesis was not rejected correspondingly.

Table 4.6***The Result of Kruskal-Wallis Test for the Recognition Type Post-Test***

Group		N	Mean Rank	Kruskal-Wallis H	DF	Sig.
Recognition test	Literate	6	11.92	1.960	2	.375
	low-literate	6	8.67			
	Illiterate	6	7.92			
	Total	18				

Note: * $p > 0.05$, $p < 0.05$

On the other hand, the learning outcome of prepositional phrases which was strikingly different across the groups of illiterate, low-literate, and literate learners given in Table 4.7 showed that groups of illiterate, low-literate, and literate learners had the mean ranks of 3.67, 11.08, and 13.75, respectively. The result pointed to a clear picture of the differences in the prepositional knowledge of groups. A large gap in prepositional phrase knowledge between the illiterate and literate groups was found that could not be seen in the two other tests.

Table 4.7***The Outcome of Kruskal-Wallis Test for the Multiple Choice Type Post-Test***

Group		N	Mean Rank	Kruskal-Wallis H	DF	Sig.
Multiple-choice test	Literate	6	13.75	11.712	2	.003
	low-literate	6	11.08			
	Illiterate	6	3.67			
	Total	18				

Note: * $p < 0.05$, $p > 0.05$

Measurement of the overall differences among groups by post hoc, as presented in Table 4.8 illustrated that the difference between illiterate and low-literate and between literate and illiterate groups was quite marked. The value of the difference in the assessment of results across the groups of illiterate and low-literate, and groups of literate and illiterate were .045 and .003 respectively, while it was 1.00 across groups of literate and low-literate.

Table 4.8

The Pairwise Comparison of Groups' Score in the Multiple Choice Type Post-Test

Sample1-sample2	Test Statistic	SD. Error	SD. Test Statistic	Sig.	Adjective. Sig.
Illiterate-low-literate	7.417	3.053	2.429	.015	.045
Illiterate-literate	10.083	3.053	3.302	.001	.003
Low-literate-literate	2.667	3.053	.873	.382	1.000

4.2. Observation

4.2.1. Observation of Alphabet Learning (pre-teaching section)

Some sessions were observed to document groups' progress in alphabetic literacy in preliminary steps. In the sessions on pre-teaching alphabets to illiterate learners, the researcher found that they might encounter difficulty to understand and make a distinction between alphabets and phonic sounds. In fact, providing responses to the immediate evaluation of naming the alphabets, most of them named phonic sounds instead of true alphabets. Comparing the process of learning alphabets, the researcher came to the conclusion that most of the learners were more successful in learning the given examples illustrated by a picture than the alphabets. After all, pre-teaching alphabets to illiterate learners, researcher realized that two of them did not know what the examples are and what the sounds are, and so unexpectedly they utilized the examples and sounds of letters in place of each other. Therefore, researcher had to code the

concept of sound for alphabets, too. For that, alphabets were categorized as a group of animals whose sounds must be recognized distinctively.

Comparatively, pre-teaching alphabets to low-literate learners produced similar results. They happened to make use of letters instead of their sounds or produced some of the letters of the alphabets in place of others, like 'B' and 'D' or 'C' and 'D'. On the other hand, in learning the alphabet, they were highly dependent upon seeing examples in a frequent and familiar context. As an illustration, learning the alphabet 'F', low-literate learners were given additional examples, popular Farsi names like 'Fariba', 'Farzad', and so on. They simply derived fair benefits from their Farsi knowledge by writing down the pronunciation of the letters and their examples.

Literate learners' outcome of alphabet learning was barely close to other groups. They seemed to be likely to improve their preliminary knowledge specifically letters and representative word examples of them in the scope of a sentence or phrase level. They did not limit themselves to the recognition of alphabet examples. Rather than that, they concerned themselves with their usage in the immediate context. Although the acquisition of the language was meaningful to them from the beginning, they did not show interest in learning much as the low-literate and illiterate groups. Still, their little attempt made far different consequences, compared with other groups.

4.2.2. Observation of Adjective Phrase Learning

As illustrated in Table 4.10, participants' highlighted errors were separated. Some pieces of evidence were found that illiterate learners got into difficulties with accurate recognition of words' categories. Categorically, the distinction between nouns and adjectives posed an inevitable difficulty. Overall, in this study, illiterate participants' learning of adjective phrases appeared acceptable in limited aspects. As far as recognition of adjective phrases was concerned, they could essentially discern images. While in the practice of oral production, they could hardly pronounce the phrases correctly or apply syntactic and functional categories like determiners or plural markers. Further, when it came to reading adjective phrases which involved more than two categories, they were usually suffering from memory or concentration laps and finally left reading. Among illiterate learners, however, some encountered fewer complications to pronounce, they still displaced categories and mixed up the adjectives and words' pronunciation. As an example, they pronounced 'man a nith' instead of 'a thin man', or 'cold weather' as 'clody weter'

Table 4.10*Common Examples of Errors in Oral Production in Separate Groups*

Groups	Possible classified errors in each group	
Literate	Grammar errors:	A old man * an old man A one nice student * a nice/ one nice student Smart childs* smart children On morning* in the morning between the box* between the boxes the old mens* the old men the under box* under the box
	pronunciation errors:	a rainy forest /raini forest/ * / rei.ni fə:r.ɪst/ cloudy weather/clɒdi wedər/* /klaʊ.di weð.ə/ medium-sized /medijum saɪz/* /'mi:.di.əm saɪz/ at breakfast /æt bri:fæst /* /æt 'brek.fəst/ a polite guest /pəʊlaɪt ɡəʊst/* / pə'laɪt ɡest/
Low-literate	Combination of grammar and pronunciation errors	clody weader* cold weather fats boy* fat boys to the box* next to the box tin han a tiny hand polit gast* a polite guest sad shilds * the sad children good setadent * a nice student an fat bovy* a fat boy
Illiterate	Combination of grammar, and pronunciation errors	bot weter* cold water a ca big* a big car bok yonde * under the box gren shirt * a blue shirt smar gel * smart girls on desk* on the desk red shirt* red shorts smalls dor* small doors

		nex box*	next to the box
		man a nith*	a thin man.
		blue coat*	blue coats

In the process of gradually approximating comprehension and production of the aforementioned phrases, the researcher witnessed low-literate learners' more constructive development in comparison to illiterate learners. Indeed, they demonstrated their interest in learning by asking questions and demanding rules for each aspect. Still, they comprehended and produced successfully single adjectives which were not followed by any other words. On the other hand, in the case of other adjective phrases which involved nouns, they showed some kind of inconsistency in the use of function words. Specifically, they removed definite and indefinite articles. Moreover, as can be seen in Table 4.11, an important difference between illiterate and low-literate learners was their higher participation in group work and pair work in class, which was unwelcome among illiterate learners.

Table 4.11

Class Time for Within Group Interaction over Three-Week Observation Span for Three Observed Groups

Class	Class time	Planned class time	Class time Without practice	Teacher talking	Teacher and student	student Pair work	Student Group work
literate	hours	13	2.5	5.5	3	2	1
	%		19.23%	42.30%	23%	15.38%	7.69%
Low-literate	hours	13	1.5	5	2.5	2.5	1.5
	%		11.53%	38.46%	19.23%	19.23%	11.53%
Illiterate	hours	13	1	7	3	2	0
	%		7.69%	53.84%	23	15.38	0%

The present study also tracked the progress of adjective phrase learning among literate learners and throughout that the key characteristics of their learning were elicited. This group of learners could distinguish adjectives from other categories of the language. They could successfully comprehend adjective phrases regardless of adjective phrases' complements or specifiers. Their higher ability to perceive and manipulate the adjective phrases in terms of pronunciation and grammar was not easy to realize, whether caused by a one-time exposure to the English language at school or their reliance on their Farsi literacy ability. Besides, it was difficult for them to comprehend and produce phrases that included marked structures such as irregular plural marking or indefinite article of "an". This result mirrored the investigation finding by Sadeghi and Maftoon (2020) which highlighted no significant effect was discovered for the learners' proficiency level on noticing the linguistic structure even when the target linguistic form got complicated. Unexpectedly, literate learners showed some resistance to group work. Substantially, some of the problematic areas uncovered by researcher common among half of the literate and illiterate learners were their low participation and attention, fear of speaking, and ignorance of instruction; they asked no questions.

4.2.3. Observation of Prepositional Phrase Learning

To address the potential effect of literacy on learning another syntactic unit of the language, prepositional phrases, both the prepositions of time and place were taught to the illiterate, low-literate, and literate learners. The researcher saw that illiterate, low-literate groups in their oral production remove indefinite and definite articles even in prepositional structure. Particularly, for illiterate learners, it was a very complex job to differ between prepositions of time and place. And when they produced them, in most cases they applied further or alternative sounds and produced nonsense phrases. Low-literate learners though generally had no problem with comprehension of prepositions of time, occasionally they muddled the prepositions of time with place. On the other hand, despite their every endeavor whether cooperative in the class or extra individual practice for meaningful learning, they appeared in production as if they were experiencing a kind of telegraphic speech stage in process of prepositional phrases acquisition. In other words, their oral production was subject to defective spelling pronunciation, and transformational rules. One of the major differences in the acquisition of prepositional phrases which also could be highlighted as the most noticeable challenge literate learners faced was mistaking the prepositions of time like *in* for *on* and *at*. In fact, it did not cause any troubles for them to express the rules and how

different the prepositions might be applied. But, when it came to the usage, it became quite intricate. Accordingly, they for example used 'play in night' instead of 'play at night' or 'at Friday' rather than 'on Friday'. It should be noted that the area of adjective phrases was still harder for them to produce.

5. Discussion

The result of this comparative study of learning prepositional and adjective phrases by illiterate, low-literate, and literate learners approximately mirrored the findings of previous studies. Based on the result attained from the tests in the current study, the development of adjective and prepositional phrases in English emphatically was signified to be not independent of learners' first language literacy. August's (2006) comparative research on the transfer from the first language to the second language among learners at two different levels of literacy revealed that high-level-literacy learners were more equipped with reading strategies and could benefit from transferring those skills to the second language learning context. Learning the aimed phrasal structures was uncomplicated as long as learners possessed an elementary literacy level. Besides, literate and low-literate learners appeared to encounter a number of learning difficulties that were of similar types, while the illiterate group particularly had further different problematic issues.

Furthermore, when there existed one-to-one correspondence between language items in English and Farsi, a limited level of literacy seemed to suffice for learning and learners appeared to positively transfer rules of first language to the second one. Nevertheless, little evidence was available to claim that when there was barely one-to-one correspondence between language items, learners with no or low literacy level confronted serious challenges. This was because most illiterate learners deleted any articles before adjective phrases in oral production whereas some of the low-literates did the same. Part of the difficulty of the development of the phrasal construction specifically by illiterate and low-literate learners found to have arisen from the burden imposed on them by the nature of the English language which was opaque and required learners to know both morphosyntactic and prosodic units. Learners' unsuccessful try while pronouncing the words suggested that they could acknowledge the difference though could not refrain from that to produce the phrases and words correctly. This finding is consistent with Boon (2014) view that the level of transparency of language to be learned heavily influence the rate and degree of success of literacy acquisition.

Another potential source of difficulty discovered through the observation was learners' inability to distinguish between marked and unmarked pairs of an item. Literate learners were conscious of the differences between marked and unmarked items but they rarely put them into use. The same as for literate learners, knowing the difference between marked and unmarked could not lead to production for low-literates. After all, illiterate learners' awareness of the distinction was limited to responding to questions and application of knowledge immediately after teaching. The findings also indicated something more important than illiterate learners' limited ability to decode adjective or prepositional phrases; they made a new category of words by seeing irregular plural forms of nouns like man and foot.

Low-literate and illiterate learners' errors provided evidence that the process of learning adjectival and prepositional phrases was not free of the intralingual transfer. Based on the results, intralingual errors made by illiterate learners were interpreted predominately as problematic pronunciation like addition or replacement of sounds. It also signified that consistent with their level of literacy, learners made more significant errors. Therefore, any intralingual transfers made by literate learners were expected by low and literate learners.

The overall result of the research pointed out that even in the process of learning adjectives, nouns, and prepositions rote-learning, illiterate learners could not successfully perceive them. Actually, this finding approximately reflected the result of observation made by Kurvers and Van de Craats (2007) in which the performance of participants with literacy was far better than those with no literacy in the Pseudo-word repetition task. As can be seen, with the increased level of literacy, the practice of learning by rote became easier and neutralized. In general, illiterate learners' performance in the repetition of words and examples was incomplete in a way that their production was replete with grammatical and pronunciation mistakes. Low-literate learners' ongoing avoidance of making pronunciation mistakes consciously could not work, which contributed to experiencing several unidentified mistakes close to illiterate learners. On the other hand, literate learners' productions were not free of errors, yet their errors were known and familiar which led to making a clear-cut distinction among them.

6. Conclusions

This study aimed to examine the differences among the adult illiterate, low-literate, and literate groups in adjectival and prepositional phrase acquisition and to compare the difficulties they encountered in the acquisition of phrases. Findings were particularly in line with previous studies. For example, compared

to other groups, the lack of literacy precluded the illiterate group from successfully answering tests and gaining an average score. In fact, they faced more difficulties in reading the predetermined English phrases. Additionally, it took them longer to produce English adjectival and prepositional phrases, especially those including more than one-syllable adjectives and nouns. Based on the data collected from the tests in the present study, there was a significant difference among groups of learners in matching and multiple-choice type post-tests, while no profound difference in the recognition test was found.

The practical observations showed that despite different graphemic-phonemic awareness, the groups almost encountered similar troubles in their oral production and development process. One of the main difficulties in learning phrasal structures that sounded different among groups was the irregularity of grammatical and pronunciation mistakes made by illiterate and low-literate participants while producing the phrases orally. Sometimes, they created an unusual blend of lexical and pronunciation errors that made the interpretation of the mistakes and their correction highly problematic for the teacher. Furthermore, to explain one of the most prominent challenges groups encountered, the influence of inter-language interference in phrase order and intra-language transfer in the use of function words like determiners and plural marks of phrases must be specialized. Consequently, all difficulties were not easy to define, because they were peculiar to each group and their literacy levels. Still gained information about errors difficulties learners faced in the production of phrases can lead to a new and improved plan for their acquisition.

References

- Allami, H., Ramezani, M. (2021). Role of L1 and L2 in the organization of Iranian EFL lived narratives. *Iranian Journal of Applied Linguistics*, 24(1), 36-66.
- Ardila, A., Rosselli, M., & Rosas, P. (1989). Neuropsychological assessment in illiterates: Visuospatial and memory abilities. *Brain and Cognition*, 11(2), 147–166. [https://doi.org/10.1016/0278-2626\(89\)90015-8](https://doi.org/10.1016/0278-2626(89)90015-8)
- August, D., Shanahan, T. (2010). *Developing literacy in second-language learners: Report of national literacy panel on minority-language children and youth*. Lawrence Erlbaum.
- August, G. (2006). So, what's behind adult English second language reading? *Bilingual Research Journal*, 30(2), 245–264.

- Bigelow, M., Delmas, R., Hansen, K., & Tarone, E. (2006). Literacy and the processing of oral recasts in SLA. *TESOL Quarterly*, 40(4), 665–689. <https://doi.org/10.2307/40264303>
- Bigelow, M. & Schwarz, R. (2010). *Adult English language learners with limited literacy*. National Institute for Literacy.
- Bigelow, M. & Vinogradov, P. (2011). Teaching adult second language learners who are emergent readers. *Annual Review of Applied Linguistics*, 31, 120–136.
- Boon, D. (2014). Adult literacy education in Timor-Leste in recent years: From research to practice. In H. Loney, A.B. da Silva, N.C. Mendes, A. da Costa Ximenes & C. Fernandes (Eds.), *Understanding Timor-Leste 2013* (pp. 137–143). Timor-Leste Studies Association.
- Bramão, I., Mendonça, A., Faísca, L., Ingvar, M., Petersson, K. M., & Reis, A. J. (2007). The impact of reading and writing skills on a visual-motor integration task: A comparison between illiterate and literate subjects. *International Neuropsychological Society*, 13(2), 359–364.
- Castro-Caldas, A. (1998). The illiterate brain. Learning to read and write during childhood influences the functional organization of the adult brain. *Brain*, 121(6), 1053–1063. <https://doi.org/10.1093/brain/121.6.1053>
- Dabrowska, E. (2012). Different speakers, different grammars: Individual differences in native language attainment. *Linguistic Approaches to Bilingualism*, 2(3), 219–254.
- Dellatolas, G., Braga, L. W., Dn. Souza, L., Filho, G. N., Queiroz, E., & Deloche, G. (2003). Cognitive consequences of early phase of literacy. *Journal of the International Neuropsychological Society*, 9(5), 771–782. Doi: 10.1017/S1355617703950107
- Ediger, A. M. (2006). Developing strategic L2 readers by reading for authentic purposes. In E. Uso-Juan, & A. Martinez-Flor (Eds.), *Current trends in the development and teaching the four language skills* (pp.303–328). Mouton De Gruyter Verlag.
- Kurvers, J., & Van de Craats, I. (2007). Memory, second language reading and lexicon: a comparison between successful and less successful adults and children. In N.faux, & H. Major (Eds.), *Low educated second language and literacy acquisition: Research, policy and practice. Proceeding of the second annual forum* (pp. 65–79). The literacy institute.

- Kurvers, J. (2007) Development of word recognition skills of adult L2 beginning readers. In N. Faux (ed.) *Low-Educated Second Language and Literacy Acquisition: Research, Policy and Practice. Proceedings of the Second Annual Forum* (pp. 23–43). The Literacy Institute.
- Kurvers, J., & Ketelaars, E. (2010). Emergent writing of LESLLA learners. In C. Schoneberger, I. Van de Craats, & J. Kurvers (Ed.), *Low-Educated second language and literacy acquisition proceedings of the 6th Symposium, Cologne* (pp. 40–66). Centre for Language Studies.
- Lei, M. & Lomax, R.G. (2005). The effect of varying degrees of nonnormality in structural equation modeling. *Structural Equation Modeling*, 12(1), 1–27. https://dx.doi.org/10.1207/s15328007sem1201_1
- Marrapodi, J. (2013). What doesn't work for the lowest level literacy learners and why? In T. Tammeline-Lain, L. Nieminen & M. Martin (Eds.), *Low-educated adult second language and literacy acquisition. Proceedings of the 8th Annual Symposium*, (pp. 46–64). University Library of Jyväskylä.
- Matute, E., Leal, F., Zarabozo, D., Robles, A., & Cedillo, C. (2000). Does literacy have an effect on stick construction tasks? *Journal of the International Neuropsychological Society*, 6(6), 668–672. <https://doi.org/10.1017/s1355617700666043>
- Moss, K. (2016). Acquisition of English morpho-syntax and the development of reading by immigrant adults. Newcastle University.
- Odlin, T. (1990). Word-order transfer, metalinguistic awareness, and constraints on foreign language learning. In van Patten, B. & Lee, J. F. (eds.), *Second language acquisition/foreign language learning* (pp. 95–117). Multilingual matters LTD.
- Petersson, K. M., Reis, A., Askelof, S., Castro-Caldas, & Ingvar, M. (2000). Language processing modulated by literacy: A network analysis of verbal repetition in literate and illiterate subjects. *Journal of Cognitive Neuroscience*, 12(1), 364–382.
- Pettitt, N. M., & Tarone, E. (2015) Following Roba: What happens when a low-educated adult immigrant learns to read? *Writing Systems Research*, 7(1), 20–38, DOI:10.1080/17586801.2014.987199?

- Reis, A., Guerreiro, M., & Castro-caldas, A. (1994). Influence of educational level of non-brain-damaged subjects on visual naming capacities. *Journal of Clinical and Experimental Neuropsychology*, 16(6), 939–942. <https://doi.org/10.1080/01688639408402705>
- Reis, A., & Castro-caldas, A. (1997). Illiteracy: A cause for biased cognitive development. *Journal of the International Neurobiological Society*, 3(1), 444–450.
- Sadeghi, S., & Maftoon, P. (2020). Factors mediating noticing: An investigation in to the impact of the complexity of target structures and learners' L2 proficiency level. *Iranian Journal of Applied Linguistics*, 23(1), 83-108.
- Spada, N., & Fröhlich. (1995). *Colt observation scheme: communicative orientation of language teaching coding conventions& Applications*. NCELTR.
- Strube, S., van de Craats, I., & Van Hout, R. (2013). Grappling with the oral skills: the learning processes of the low-literate second language and literacy learner. *Journal of Applied Language Studies*, 7(1), 45–65.
- Tarone, E., Bigelow, M., & Hansen, K. (2007). The impact of alphabetic print literacy level on oral second language acquisition. In N. Faux (Ed.), *Low educated second language and literacy acquisition: Research, policy and practice* (pp.23–43). Literacy Institute at Virginia.
- Vainikka, A., and Young-Scholten, M. (2018). Literacy in the development of L2 English morphosyntax. Project of Organic Grammar.
- Wall, T. (2017). *L1 literacy and its implications for LESLLA immigrant women in Canada*. [Master's thesis, Hamline University]. St. Paul, Minnesota.
- Young-scholten, M., & Naeb, R. (2010). Non-literate L2 adults' small steps. In T, Wall & M. Leong (Eds.), *Low educated second language and literacy acquisition* (pp. 45–68). Bow Valley College.
- Young-Scholten, M. (2013). Low-educated immigrants and the social relevance of second language acquisition research. *Second Language Research*, 29(4), 441–454. Doi: 10.1177/0267658313491266

Young-Scholten, M., & Limon, H. (2015). Creating new fiction for low-educated immigrant adults: Leapfrogging to digital. *The International Journal of the Book*, 13(4), 1–9. <https://doi.org/10.18848/1447-9516/CGP/v13i04/37055>

Appendix A

Native Language Literacy Assessment (Farsi and English)

Native Language Literacy Assessment

English NLLA

Directions to read to the student:

Dear Student,

Welcome to our school. This paper will help us decide which program is best for you.

Please fill out the paper by yourself. Write answers in [native language/language of schooling]. If you cannot answer all the questions, fill out the parts you can and leave the rest empty. Thank you.

Part I

1. Today's Date: _____ ☐
2. Name: _____ ☐
3. Your age: _____ ☐
4. Languages you speak: _____ ☐
5. A place you have lived before: _____ ☐

Part II

6. What are your favorite things to do?
_____ ☐
7. What are your favorite foods?
_____ ☐
8. What are your responsibilities where you live? How do you help in the house?

_____ ☐
9. What are some things you do well?

_____ ☐
10. What are your plans for the future? Try to write a few sentences.

_____ ☐

[Type here]

ارزیابی سواد زبان مادری

- 1- تاریخ امروز: ☐
- 2- اسم و نام خانوادگی: ☐
- 3- سن شما: ☐
- 4- زبانهایی که به آن مسلط هستید: ☐
- 5- محل اقامت و زندگی: ☐

6- کارهای مورد علاقه ی شما چیست؟ ☐

7- غذاهای مورد علاقه ی شما چیست؟ ☐

8- چه مسئولیت هایی در خانواده تان دارید؟ ☐

9- در چه کار هایی مهارت دارید؟ ☐

10- برنامه شما برای آینده چیست؟ به طور خلاصه بگویید؟ ☐

11- داستان های زیر بخوانید.

من امروز سرحال هستم. احساس میکنم اتفاق خوبی قرار است بیفتد. صبح خود را با ورزش کردن شروع می کنم. با برانرم به پیاده روی می روم]

Appendix B

Post Tests of Prepositional and Adjectival Phrases

کنار صفتی که مربوط به age هستند را شماره 1 و صفتی که مربوط به size هستند را شماره 2 و صفتی که مربوط به color هستند شماره 3 و صفتی که مربوط به origin هستند 4 را بنویسید.



 Young-----	 Iran-----	 Tehran-----
 Small-----	 old-----	 black-----
 Blue-----	 tiny-----	 Africa---
 Big-----	 baby-----	 red-----

جملات متضاد را به هم وصل کنید

 Hot weather	 An old man
 White shoes	 A small car
 A big bus	 Cold weather
 A young woman	 A sad woman
 A happy girl	 Black shoes