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Yusra Yahia: The Effect of Morphological Knowledge on Receptive and Productive Vocabulary Size
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The Effect of Morphological Knowledge on Receptive and Productive Vocabulary Size

Research has shown that morphological knowledge is an effective tool in building vocabulary in L1. However, it is still largely unknown whether strategies for vocabulary building that prove fruitful for L1 learners also produce the same significant gains for L2 learners. The aim of this paper is to see if there is any relation between Syrian EFL learners' morphological knowledge and their vocabulary size. The participants were divided into two groups. To start the research, both groups were administered two pretests, which measured their vocabulary size and their morphological awareness. During the research one group completed morphology awareness tasks for three weeks, while the other was following a general course of classes. Finally, both the study and the control group completed post tests including vocabulary size tests and morphological awareness tests. The results show that there is a statistically significant correlation between morphological awareness and English vocabulary size among Syrian learners. Moreover, this correlation appeared to be more intense in the group who undertook the morphological awareness tasks. My conclusion is that including morphological instructions in Syrian classrooms might increase students' vocabulary size efficiently.

Keywords: morphological awareness, vocabulary size, morpheme.

1. Why morphological knowledge is key?

It is stated that approximately 50% of all words in the English language are morphologically complex (Goulden, Nation, and Read, 1990). The significance of the role played by morphological knowledge in the acquisition of new vocabulary items pivots upon the notion that many new words are in fact derivatives of existing words. Thus, there is a growing trend among EFL educators that perceive teaching correct morphological knowledge to students as an effective and critical vocabulary learning tool. Despite the confirmation given by many studies in L1 regarding the effectiveness of morphological awareness in its role in increasing learners' vocabulary knowledge and the ability to correctly infer the meaning of new words (Bellomo, 2009; Bertram et al., 2000; Carstairs-McCarthy, 2002; Carlisle and Stone, 2003; Nunes and Bryant, 2004), to date, there is a paucity of research conducted that adequately evaluates the correlative relationship between morphological awareness and vocabulary size in L2 (AlFarsi, 2008; Alsalamah, 2011 and Yahya et al., 2012).

It is estimated that 4,000 out of 10,000 words encountered by fifth-grade students in the US are derived from frequent words (Nagy et al., 1994, cited in Al Farsi, 2008). In the case of high school US students, remarkably, 13,000 out of

30,000 words are derivatives (Biemiller, 2004). Many studies have asserted that morphological awareness can directly improve reading abilities in students (Kieffer and Lesaux, 2008 and Koda and Zehler, 2008), and that having better morphological awareness will lead to a larger vocabulary size, as well as better reading skills and overall language comprehension (de Bot et al., 1997, Bowers et al., 2010 and Lee, 2011). In a study by Deacon and Kirby (2004) the correlation between morphological awareness and reading comprehension of students was investigated. The researchers took a total of four years to compare the effect of phonological awareness and inflection awareness on reading progress among second, fourth, and sixth graders. After three years into their investigation, the researchers clearly demonstrated that morphological awareness significantly contributed to reading progress, even when the variable of phonological awareness among participants was adequately controlled.

2. Research on the significance of morphological knowledge in L2

To date, very few studies have investigated the correlative relationship between morphological knowledge and vocabulary size in L2 versus the comparatively larger volume of similar studies in L1. Morin (2003) called attention to morphological awareness as a strategy to detect the meaning of L2 new words. In this study, Morin selected native English speaking learners of Spanish to be the subjects of her research. She assessed the effectiveness of Spanish derivational morphology in the learners' vocabulary in Spanish. The results denoted that when learners were introduced to Spanish derivational morphology, it led to an improvement in vocabulary size, yet Morin stated that the results were not conclusive to all learners. In spite of the inconclusive results, Morin encouraged learners of L2 to foster their morphological awareness and benefit from word-formation rules. The author asserts the acquisition of this knowledge to be critical for learners to be able to correctly infer the meaning of novel words.

Alsalamah (2011) carried out a similar study to examine the possible correlation between English vocabulary size and morphological awareness of Saudi female students at King Saud University. She assigned 89 students with two tests to measure their vocabulary size and morphological awareness. The two selected tools used to investigate this were the Vocabulary Size Test (Nation and Beglar, 2007) and the Morphological Awareness Test (Chang et al., 2005). Findings from The Vocabulary Test indicated that the average students' vocabulary size was over 4,000 word-families, ranging from a minimum of 1,000 and up to 14,000 word-families. Contrastingly, results from The Morphological Test indicated that students' overall morphological awareness level was relatively low. Alsalamah (2011) concluded from these findings that there was no correlative relationship between vocabulary size and morphological awareness. However, the author justified this position on the grounds of three underlying reasons. The first, was due to the increasing difficulty of the words in

the vocabulary size test, which included 14 levels, as the levels of the test increased. The second reason mentioned by Alsalamah was that she modified the morphological awareness test to better suit university students; such modifications, according to Alsalamah, might have led to the absence of any relationship between morphological awareness and vocabulary size. The last reason was related to the different timing of the testing sessions.

2.1 Experimental Questions

Due to implications of the aforementioned points regarding the application of morphological knowledge as an effective tool for expanding learners' vocabulary size, a follow on study was conducted by Yusra Yahya in the capital city of Syria during the first term of the academic year (2018/2019) to identify the correlation, if any, between morphological awareness and vocabulary knowledge among Syrian students. This study also aimed to investigate the benefits of explicit teaching of morphological awareness as an effective strategy for developing Syrian EFL students' vocabulary size since no other study, to Yahya's knowledge, has been conducted in the Syrian context to tackle this issue. Moreover, it was the first study of its kind to pre-design bespoke morphological awareness tasks to investigate their potential efficacy in enhancing Syrian learners' vocabulary size. Four questions were raised by Yusra Yahya to be experimentally answered:

1. To what extent are EFL students aware of the *analytic* and the *synthetic* aspects of morphological knowledge? Since EFL students are not invariably exposed to explicit instruction on morphological knowledge, it was expected that their knowledge will not be expansive, and would be below average i.e. the basic knowledge of recognizing morphemes in words without being able to assign them to meaning or function, or without the ability of using these morphemes to form new vocabulary. Therefore, Yahya predicted that the participants of this research will not score more than 50% of the morphological tests.
2. Is there any correlation between EFL students' English morphological awareness and their vocabulary size? The researcher hypothesized that the results of the tests would indicate a correlative relationship between Syrian EFL students' morphological knowledge and their English vocabulary size.
3. Do EFL students with more synthetic knowledge of morphology have more receptive vocabulary size versus a productive one? Moreover, do learners with more analytic knowledge of morphology tend to have a more productive vocabulary size versus a receptive one? According to Nation (2001), the ability to recognize morphemes in a word (the analytic aspect of morphological knowledge) is considered an aspect of receptive vocabulary knowledge. Conversely, the ability to reconstruct morphemes to produce new words (the synthetic aspect of morphological knowledge) is identified as an aspect of productive vocabulary knowledge. Accordingly, the researcher

expected that the synthetic aspect of morphology would correlate with productive vocabulary size. Contrastingly, the analytic aspect of morphological knowledge would correlate with receptive vocabulary size.

4. Will EFL students who undertake morphological awareness tasks perform better in both tests than EFL students in the control condition? Hence, will the intervention group demonstrate a more obvious correlation between morphological knowledge and vocabulary size than the control group? The researcher hypothesized that learners who were assigned to morphological awareness tasks would be exposed to significantly more information about the field of morphology and word formation than their counterparts, which may enable them to perform better in both vocabulary size and morphology knowledge tests. Thus, the results of the EFL students in the intervention group who were assigned to morphological awareness tasks, were surmised to demonstrate a more significant correlation between morphological knowledge and vocabulary size than the group of EFL students who were not assigned to any morphological tasks.

3. The Study

This study was conducted on Syrian EFL students who were assigned to either the control or study groups. Members of both groups undertook two pre-tests to measure their vocabulary size and morphological knowledge. In order to effectively ascertain a correlative link between morphological knowledge (especially the knowledge of suffixes and prefixes), and their vocabulary size, the researcher designed a miniature course on basic morphological knowledge and this was offered to the EFL students in the intervention group only. This miniature course solely focused on teaching EFL students how to distinguish and manipulate morphemes correctly. In other words, the designed morphological awareness tasks concentrated on identifying suffixes and prefixes and employing them appropriately to formulate new words. The aim of imparting this knowledge to the intervention group was to establish whether morphological knowledge would assist EFL students in increasing their vocabulary size.

The intervention group (i.e. the study group) was assigned to the morphology awareness tasks for three weeks, while the control group was not. Subsequently, two sets of post-tests were distributed to both groups. First, there were the vocabulary tests, namely, Nation's (2001) Vocabulary Levels Test (VLT), and the Productive Vocabulary Level Test (PVLT) by Laufer and Nation's (1995). These tests were intended to measure students' *receptive* and *productive* vocabulary size. Second, the morphological awareness test by Chang et al. (2005) was utilized. This test measured learners' *synthetic* and *analytic* aspects of morphological awareness.

3.1 Participants

A total of 104 Syrian 11th grade EFL students in the academic year 2018/2019 were included as the subjects of the present study. These subjects had approximately 7 years of learning the English language and the first language of these participants was Arabic. Gender was not an independent variable in this study, but it is worth mentioning that there were 64 male and 40 female participants in total. The learners were divided into two groups. 74 students were assigned to the intervention group which was given morphological awareness tasks. The other 30 were assigned to the control group and were not given morphological awareness classes that were specifically designed for the present study. The researcher decided to make the study group outnumber the control group for two reasons. First, the more participants are there in the morphology miniature course, the more authentic and reliable results can be obtained to draw a conclusion on how this intervention might be effective. Second, the study was conducted during the Syrian civil war and many students were forced to skip some school days at that time, therefore, the researcher aimed at guaranteeing a sufficient number of participants in the morphology course.

3.2 Procedure

At first, the 74 subjects in the study group underwent two pretests to measure their vocabulary size and their morphological knowledge. First, there were the vocabulary tests, namely, Nation (2001) Vocabulary Levels Test (VLT) and Laufer and Nation's (1995) productive version of the Vocabulary Levels Test (PVLT). Second, Chang et al. (2005) morphological awareness test was administered. Then, the researcher commenced the morphological awareness tasks with the study group by distributing five handouts that provided the learners with basic information about word formation and suffixes and prefixes. These five handouts were tackled in seven sessions in three weeks. At the end of the course, post-tests measuring the students' subsequent vocabulary size and morphological awareness were distributed to spot out any changes from the pre-tests. Below are examples of the morphological and vocabulary tests:

-Analytical morphology:
Please segment the following words into meaningful chunks, and state the meanings of those chunks
Harden: hard (not soft)+ en (verb suffix)= make something hard

-Synthetic morphology:
Using only one word, come up with names for the objects or actions that are described below:
*If a researcher **examined** James. James is an **examinee***
*If a researcher **interviewed** Ahmed. Ahmed is an ……. (interviewee)*

-Receptive vocabulary:
You must choose the right word to go with each meaning. Write the number of that word next to its meaning. Here is an example.
1. business
2. clock _____ a _____ part of a house
3. horse _____ b _____ animal with four legs
4. pencil _____ c _____ something used for writing
5. shoe
6. wall

-Productive vocabulary:
Complete the underlined words. 'He was riding a bi------ (bicycle)'.

Both of the morphological awareness tests in both groups aimed to help the researcher answer the first research question that dealt with measuring the morphological awareness possessed by Syrian learners involved in the study. Those tests, along with the vocabulary size tests, were necessary to find out if any correlation existed between the two fields among the subjects and that would answer the second research question in the study. The researcher needed to test both aspects of participants' morphological knowledge (analytic and synthetic) and both dimensions of their vocabulary size (receptive and productive) in order to obtain more detailed information regarding the hypothesis that subjects who had more analytic/synthetic morphological knowledge will tend to have more receptive /productive vocabulary size, which in turn would answer the third question posed by this research.

As earlier mentioned, the researcher designed a miniature morphological awareness course to elucidate whether this information could assist learners to increase their vocabulary size by the end of the course. The course concentrated on identifying suffixes and prefixes which represented the most effective and common depiction of word-formation. The course combined five handouts that contained 96 different suffixes and prefixes with examples of each and exercises to demonstrate the application of those suffixes and prefixes in the students' recognition of morphologically complex words. An example of these tasks is shown below:

Locative Prefixes:

Prefix	**Examples**	**Meaning**
super-	*Super*ego	
sub-	*Sub*class	
inter-	*inter*continental	
trans-	*trans*atlantic	

Exercise 1:
Choose one of the preceding prefixes that best suit the following words:
…… oceanic ……title
……change …… script

A comparison of the results from the post-tests undertaken by both the study and control groups will reveal if this course was successful in developing the vocabulary size of the learners in the study group- thus answering the fourth question of this present study.

3.3 Data Analysis

The results of the tests for both groups were analyzed using statistical tests (SPSS). Mainly and as expected, the results confirmed that there is a statistically significant correlation between morphological awareness and English vocabulary size among Syrian learners. Mean scores of both morphological knowledge tests were computed to answer question one which aimed at measuring Syrian learners' awareness of the analytic and synthetic aspects of morphological knowledge. To be more specific, the mean scores of both groups' analytic and synthetic aspects of morphological knowledge were calculated separately and collectively. Questions two and three of this research address the correlation between Syrian learners' morphological awareness and their vocabulary size, and on investigating the significance of this correlation with each aspect of morphological knowledge respectively. To answer these questions, correlation coefficients between morphological awareness (synthetic and analytic) and the amount of English vocabulary (receptive and productive) built by Syrian EFL students were computed. Finally, the correlation coefficient between morphological knowledge and vocabulary size due to group variable in the post-test was calculated and compared to the correlation coefficient in the pre-tests in order to answer question four; this research question related to the performance of the study group and the control group in the pre and post-tests, and the strength of the correlation in each group.

4. Results and Discussion

Results of question one reveal that Syrian EFL high school learners had 36.3% of the analytic morphological awareness with a mean score of 11.98 (out of 33), while they recorded 55.2% of synthetic morphological awareness with a mean score of 8.29 (out of 15). The results, accordingly, demonstrate that Syrian EFL students' morphological awareness as a whole was 42% (mean score 20.2 out of 48). The results of the synthetic and analytic morphological awareness tests can be justified by the fact that half of the test items in the synthetic test focused on inflectional morphemes rather than derivational ones, while the analytic test focused as a whole on derivational morphemes (suffixes and prefixes) which the students were less familiar with. An independent sample t-test (two-tailed) was

conducted to detect possible mean differences between the study group and the control group in the two pre morphological awareness tests. The result of the test reveals no significant difference between the two groups in the mean scores for the pre morphological awareness tests with (t value = 1.2, p = 0.2 for equal variances) and (t = 1.5, p = 0.1 for unequal variances). Table 1 depicts these results:

Table 1
Mean scores for learners' awareness of the analytic and the synthetic aspects of morphological knowledge

Variables	**Group**	**Means**	**Min**	**Max**	**Std**
Analytic*	Study	12.72	2	24	4.99
	Control	11.24	4	16	3.10
Synthetic**	Study	8.48	1	14	3.23
	Control	8.10	1	13	3.01
Total	Study	21.20	6	37	7.34
	Control	19.33	9	29	5.13

The 74 subjects in the morphological analysis test were asked to segment words into smaller meaningful morphemes and attribute meanings to those morphemes. In the pre-test, the subjects who managed to break words into smaller units, a few of them (12 out of 74) were able to give the meanings to all those morphemes especially suffixes and prefixes. Due to lacking the meanings of those suffixes and prefixes in their answers, they could not perceive the whole meaning of the word, and therefore the answer was incomplete. Moreover, many of the subjects (76% of them) showed spelling mistakes when segmenting the words into smaller morphemes. For example, many of the students (68%) analyzed the word 'partially' into *parti* or *party* and *-ally*. This mistake was overcome during the post-test when most of the 50 subjects in the study group who incorrectly segmented the word were able to identify the correct morphemes i.e. *part*, *-ial*, -ly, and give the meaning accompanied with each morpheme. This positive outcome of the course implies that morphological awareness has a beneficial effect on students' spelling ability (Nunes and Bryant, 2004, 2006). Nunes and Bryant (2006) assert that obtaining sufficient information about morphemes will assist young learners to become familiarised with the spelling system of English due to the point that the morphemic structure of words frequently determines their spelling. They state in the same book:

It is an important fact, though shockingly neglected, that one of the best ways to help children to become experts in reading and spelling is to make sure that they

are thoroughly familiar with the morphemic system in their own language (Nunes and Bryant, 2006: 16).

It is noteworthy that subjects in the study group, whose mean score for the pre morpheme identification test was (12.72 out of 33), representing (38.5% of the analytic knowledge), demonstrated better comprehension of affixation and also performed better in the post morpheme identification test by significance (p = 0.00) and mean score (15.7 out of 33 with Std = 5.6) representing a (47.5%) of the total score. Hence, subjects in the study group demonstrated a greater ability in analyzing words correctly and associating appropriate meanings to the affixes attached to base words. Moreover, the study group showed an overall improvement in the post morphological structure test by significance (p = 0.00) and mean score (10.05 out of 15 with Std = 3.2) representing (67% of the synthetic knowledge)- whereas their mean score in the pre morphological structure test was (8.48 out of 15) representing (56.5% of the synthetic aspect). To sum up, the total pre morphological awareness of the study group was (44.1%), while their percentage of morphological awareness after the three-week morphological awareness tasks was (53.6%).

In the control group, the subjects who scored (34%) in the pre morphological analysis test and (54%) in the pre morphological synthesis test, were not able to make improvement in the post morphological analysis test (p = 0.071 and mean score = 10.3 out of 33 with Std = 3.1) representing (31.2%) and in the post morphological synthesis test as well (p = 0.058 and mean score = 8.7 out of 15 with Std = 2.5) representing (58%). This indicates that the morphological awareness miniature course has successfully raised morphological awareness among subjects of the study group and has advanced their understanding of morphemes, particularly those that pertain to derivational affixes.

4.1 Correlation between morphological knowledge and vocabulary size

An analysis of the findings of the morphological awareness tests (the analytic test and synthetic test) as well as the vocabulary size tests (the receptive and productive vocabulary tests) for both groups (104 subjects) allows us to address question two of this present research- i.e. to identify any potential correlation between subjects' morphological awareness and their relative vocabulary size. A Pearson correlation test was performed. The correlation coefficient takes on values ranging between (+1 and -1). Value (0) indicates no relationship between the two variables. Values above (0) distinctively indicate a positive relationship. The results as shown in Table (2) demonstrate that the correlation coefficients between morphological awareness and the level of English vocabulary acquired by Syrian EFL students was (0.573), by significance (p = 0.00). This indicates that there is a statistically significant correlation at the significance level ($\alpha \leq$ 0.05) between morphological awareness and the size of English vocabulary

acquired. The results of question two then confirm the outcome reached by some studies in L2 (Chang et al., 2005; Latifi et al., 2012; Schiff and Calif; 2007 and Yahya et al., 2012) that all have highlighted the strong relationship between morphological awareness and vocabulary size. Thus, the use of morphological knowledge as an effective vocabulary learning strategy can be recommended.

Table 2
Correlations between morphological awareness and the amount of English vocabulary

Variables		**Receptive Vocabulary**	**Productive Vocabulary**	**Total Vocabulary**
Analytic	Value	0.523**	0.517**	0.540**
	Sig. (*p*)	0.00	0.00	0.00
Synthetic	Value	0.427**	0.470**	0.455**
	Sig. (*p*)	0.00	0.00	0.00
Total	Value	0.920**	0.826**	0.573**
	Sig. (*p*)	0.00	0.00	0.00

** correlation coefficients significant at ($\alpha \leq 0.05$)

4.2 Analytic/synthetic morphology and receptive/productive vocabulary size

The results of the study have also provided a detailed description of the relation between the two aspects of morphological knowledge (analytic and synthetic) and the two dimensions of vocabulary size (receptive and productive). The results of the whole 104 subjects as shown in Table (2) reveal that correlation coefficients between the *synthetic* knowledge of morphology and *productive* vocabulary (0.470**) was higher than the correlation between synthetic knowledge of morphology and receptive vocabulary (0.427**). This result implies that learners who have more synthetic knowledge of morphology tend to have more productive vocabulary knowledge than a receptive one. Conversely, learners' *analytic* aspect of morphological awareness correlated more with *receptive* vocabulary (at 0.523**) versus productive vocabulary (0.517**) as indicated in Table 3:

These numbers indicate that learners with more *analytic* morphological knowledge tend to have a more *receptive* vocabulary size (correlation coefficient 0.523) than a productive one. In other words, these divergent aspects of the two studied fields are at the same level of linguistic knowledge. Accordingly, both researchers and educators are able to identify indirectly if a learner has more receptive or productive vocabulary size by means of measuring their analytic and synthetic morphological knowledge only- without the need to undertake further vocabulary size tests.

Moreover, these results indicate that learners who are identified to have more synthetic aspects of morphological awareness are predisposed to possess a more productive vocabulary size. The correlation coefficient between morphological synthesis and productive vocabulary size was (0.470). Correspondingly, this

implies that testing analytic and synthetic morphology will indirectly reveal if the testee has a more receptive or productive vocabulary size. These collective findings and implications correspond to Nation's (2001) recognition of the analytic aspect of morphological knowledge as a feature of receptive vocabulary knowledge- while the synthetic aspect of morphological knowledge is considered as a feature of productive vocabulary knowledge.

Table 3

Correlations

group			post Morphological	post Vocabulary total
experimental	post Morphological	Pearson Correlation	1	.624**
		Sig. (2-tailed)	.	.000
		N	50	50
	post Vocabulary total	Pearson Correlation	.624**	1
		Sig. (2-tailed)	.000	.
		N	50	50
control	post Morphological	Pearson Correlation	1	.576**
		Sig. (2-tailed)	.	.006
		N	21	21
	post Vocabulary total	Pearson Correlation	.576**	1
		Sig. (2-tailed)	.006	.
		N	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

4.3 Correlation between morphological knowledge and vocabulary size regarding group variable:

The study has distinguished between two groups. A study group that received a miniature course in morphological awareness (mainly affixation), and a control group that did not. Results of question four reveal that learners who are provided with morphological awareness training are more likely to develop a greater vocabulary size compared to learners who are not. The subjects in the study group improved their vocabulary size by (10%). Their pre vocabulary size was (20.9 out of 48 i.e. 43%) and their post vocabulary size progressed toward (25.8 out of 48 i.e. 53%). A paired t-test indicated a significant difference between the pre and post vocabulary size of the subjects in the study group at ($p = 0.000$) as reported in Table (4):

Table 4
Paired t-test (two-tailed) for the pre and post vocabulary size tests for the study group

t	df	Sig (two-tailed)	Mean Difference	Std Error difference
3.98	49	0.000	4.90	1.2

Moreover, learners in the study group scored a higher correlation between the two targeted fields (0.624) than subjects in the control group (0.576). The difference in correlation coefficients' values between the two groups can be summarized as follows in Table (5):

Table 5

Group	**correlation coefficient**	**Sig. (*p.* value)**
Study	0.624**	0.000
Control	0.576**	0.006

Contrastingly, the control group did not show similar improvement: their pre vocabulary size was (11.6 or 24%) while their post vocabulary size was (12.7 or 26%). The difference between the two groups' post vocabulary size was significant at (p=0.000) as shown in Table (6):

Table 6
Independent-sample t-test (two-tailed) for the post vocabulary size tests for the study group and control group

	t	df	Sig (two-tailed)	Mean Difference	Std Error difference
Equal variances assumed	7.433	69	0.0001	12.68	1.8
Equal variances not assumed	10.252	68.4	0.0001	12.68	1.8

These findings empirically support the conclusions of earlier studies (Singson et al., 2000; Carlisle, 2000; Katz et al., 1991) including research conducted in L2 (Latifi et al., 2012; Schiff and Calif; 2007 and Yahya et al., 2012) regarding a significant correlation between morphological knowledge and vocabulary size.

5. Summary

The search for the correlation between vocabulary size and morphological awareness among Syrian EFL high school learners was the main purpose of the study introduced in this article. The subjects of the study were 104 Syrian 11th grade EFL students. Those learners were divided into two groups. 74 learners were in the group which was assigned with morphological awareness tasks (study group) while the other 30 were in the control group.

To elucidate a possible correlation between morphological knowledge, particularly knowledge of suffixes and prefixes, and vocabulary size among Syrian EFL students, the researcher designed a miniature course that provided basic morphological awareness to participants in the study group only. This course intensively focused on developing subjects' ability to distinguish and manipulate morphemes (mainly suffixes and prefixes) accurately. Intentionally, the morphological awareness tasks focused on teaching correct identification of suffixes and prefixes. The main purpose of providing this training to the study group members was to discover whether adequate morphological knowledge would lead to enhanced vocabulary size.

At the outset, the 74 subjects of the study group had two pre-tests to measure their vocabulary size and their morphological knowledge. First, there were the vocabulary tests, namely, Nation (2001) Vocabulary Levels Test (VLT) and Laufer and Nation's (1995) productive version of the Vocabulary Levels Test (PVLT). Chang et al. (2005) morphological awareness test was the second test used. The researcher's subsequent step was to initiate the morphological awareness tasks with the study group. All learners were provided with five handouts that contained information about word formation and suffixes and prefixes. These five handouts were taught over a series of seven sessions within three weeks. At the end of the course, post-tests that measured the subsequent vocabulary size and morphological awareness level of the subjects were presented in order to identify any changes from their pre-test findings.

The results of the tests for both groups were analyzed using statistical analysis (SPSS). The results confirmed the presence of a statistically significant correlation between morphological awareness and English vocabulary size among Syrian learners. The results also indicated that learners who undertook the morphology awareness tasks (study group) performed significantly better than learners in the control group who were not likewise assigned any formal training. These results were a confirmation to the findings of other similar research such as Baleghizadeh & Golbin (2010) and Fukkink et al., (2005).

6. What is Next for Syrian EFL Classes?

In conclusion, the findings of this study strongly suggest that EFL students who obtain an in-depth knowledge of analytic and synthetic morphology, are more likely to demonstrate a better understanding of word formation and thus develop

a greater vocabulary size. This research also supports and recommends the vital integration of morphological awareness training in all EFL teaching curriculums. More specifically, this study highlights the importance of providing explicit awareness training of morphemes and word-formation to EFL students- rather than to continue business as usual and incorrectly assume that EFL students inherently possess this knowledge, as has been purported by the likes of Nunes and Bryant (2006).

Teachers are advised to instruct their students to learn the practical use of morphological knowledge in formulating new words and dissecting the skeletons of words by showing many examples of derivational morphemes along with their meanings. The researcher suggests that derivatives should not be neglected in the provision of any reading materials provided. Rather, educators are encouraged to highlight the root as well as the attached morphemes to elicit the correct rules of word-formation. Consequently, any EFL students, L2 learners or Syrian EFL students, who wish to implement an effective vocabulary learning strategy should give careful consideration to first acquiring a comprehensive pre morphological awareness training.

The results show that the tested Syrian EFL students have a fair (below medium) knowledge of identifying the internal morphemes of a word i.e. the analytic aspect of morphological awareness. This implies that Syrian learners invariably require basic training to identify morphemes and their meanings correctly to build their innate aptitude to subsequently identify them in new and unfamiliar words. Introducing lists of common suffixes and prefixes with their meanings and examples of how to manipulate them to form new words can indeed be an effective first step.

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