

## **A STUDY ON THE MORPHOLOGICAL AWARENESS OF INTERMEDIATE LEVEL ADULT TURKISH EFL LEARNERS**

**Fatma Aydin<sup>1</sup>, Ozgur Yildirim<sup>2</sup>**

<sup>12</sup>Anadolu University, School of Foreign Languages

<sup>1</sup> f.aksoy@anadolu.edu.tr

<sup>2</sup> oyildirim@anadolu.edu.tr

### **Abstract**

The purpose of the current study was to investigate morphological awareness of a group of intermediate level adult Turkish EFL learners. The participants of this study were 168 Turkish first year university students who were taking intermediate level English courses at a state university in Turkey. Morphological Awareness Test (MAT) was the data collection instrument of the study. MAT consists of two sections: Sentence Completion and Word Relation. The Sentence Completion section consists of 27 multiple-choice test items with the purpose of understanding whether the participants are aware of the grammatical and lexical functions of some common derivational suffixes in English. In the Word Relation section, the participants were provided with a list of 20 word pairs (real words), and asked whether the second word in each pair comes from the first word or not. For analyzing the data, first the descriptive statistics (mean scores and standard deviations) were calculated for the sections of MAT and for individual suffixes, then the comparisons between the sections and among the participants were made by using paired-samples t-tests and one-way repeated measures ANOVAs. Results of the study indicated that intermediate-level adult Turkish EFL learners participating in the present study had moderate to high morphological awareness; they performed better in the Word Relation task than in the Sentence Completion task; and they showed the best performance in the verb making suffixes.

**Keywords:** morphological awareness, foreign language reading, EFL, ESL

### **INTRODUCTION**

In a meta-analysis on L2 reading comprehension and its correlates, Jeon and Yamashita (2014) list ten key L2 reading component variables: L2 decoding, L2 vocabulary knowledge, L2 grammar knowledge, L1 reading comprehension, L2 phonological awareness, L2 orthographic awareness, L2 listening comprehension, working memory, metacognition, and L2 morphological awareness. Koda (2005) maintains that word knowledge is formulated in specific contexts, from which extracting lexical information is an acquired

competence that contributes to reading comprehension, as already mentioned in this study. However, it is crucial to understand the internal structure of the words to be able to extract lexical information. Koda (2005) further maintains, “in-depth awareness of such structural awareness can point up the essential competencies underlying word-knowledge accretion through reading” (p.71). In this sense, metalinguistic awareness, which refers to “the ability to identify, analyze, and manipulate language forms” (Koda, 2005: 72), plays an important role in reading development. It is

worth mentioning that metalinguistic awareness differs from linguistic awareness in the sense that it requires a general understanding of language, regardless of its specific details (Koda, 2005). As it is believed that learning to read involves the recognition of important elements of spoken language and their relation to the writing system of a language, and thus metalinguistic, there has been a boost in research on metalinguistic awareness recently (Koda, 2005). Morphological knowledge, a type of intra-word knowledge, and morphological awareness, a type of metalinguistic awareness, has gained importance accordingly. Metalinguistic awareness has been increasingly found to be beneficial for L2 reading comprehension (Kieffer & Lesaux, 2012). The purpose of the current study is to investigate morphological awareness of a group of intermediate level adult Turkish EFL learners. The research question of the study is as follows: To what extent intermediate-level adult Turkish EFL learners are aware of syntactic and lexical functions of certain suffixes in English?

Morphological awareness refers to “the ability to reflect on and manipulate morphemes and word formation rules in a language” (Kuo & Anderson, 2006:161). In other words, it is the ability to recognize the internal structure of a word, identify the root and the affixes as well as being able to form new words applying the word formation rules in a particular language.

The interest in morphological awareness and its contribution to reading achievement

surged thanks to the realization that English is a morphophonemic language. Previous to this surge in interest in morphological awareness, phonological awareness, which is defined as the ability to analyze the sound structure of words (Apel & Werfel, 2014), was once a major topic in reading research as its explicit teaching was found to have a facilitating effect on reading achievement in the pre-school and early elementary school years. Therefore, studies investigating these facilitating effects of phonological awareness scaled up. However, it was later noticed that despite the incontestable contribution of phonemic awareness to literacy and reading skills, it cannot be identified as the single most important predictor of reading achievement as literacy is naturally complex and multifaceted. Afterwards, it was recognized that morphological structure, as well as phonological structure, is an essential component of English language.

Research shows that in one way or another learners of a language are likely to benefit from morphological awareness, which entails its implementation in a language classroom. However, since morphological awareness is a multi-dimensional skill, there are various ways of instructing morphological awareness in a language classroom. Apel and Werfel (2014) describe a variety of tasks to target one or more aspects of morphological awareness. They note that it is essential to first model the task and/or strategy before carrying out the activity or presenting the use of the strategy.

**Segmenting Task:** Segmenting activities are indicated to increase learners' conscious awareness of how many meaningful units a spoken word contains. Learners are instructed how multi-morphemic words can be segmented into their smallest meaningful units. When modeling, the instructor is required to provide reasons for each unit they divide so that learners can understand that this segmentation is logical and each unit has a meaning on their own. For example, as for the word "longer", "long" is the adjective itself and has an independent meaning. The suffix -er, on the other hand, is added to most adjectives to make comparisons. In this way, learners might gain insights into the lexical and grammatical functions of inflectional and derivational affixes. In order to emphasize that the phonology of the word has nothing to do with the number of meaningful units it is formed with, it is possible to orally provide examples of words that can be mono-morphemic (such as "band") or multi-morphemic (such as "banned") depending on the context.

**Word Building Task:** It is stated that word building activities increase learners' conscious awareness of how many meaningful units a written word contains. Such activities involve forming real words or creating new ones (pseudo-words) by means of combining base words or roots with prefixes and/or suffixes. Learners might be provided with lists of common roots, prefixes and suffixes and asked to choose the prefixes and suffixes that can be attached to a certain root. Once learners tell the

prefixes and/or suffixes that can be attached to a certain root, they may discuss whether the same prefix/suffix can be attached to all members of the same part of speech and whether the spelling and/or pronunciation of the word changes as a per class activity.

**Word Sorts:** Word sorts predominantly apply to inflectional suffixes and increase learners' conscious awareness of changes in spelling once a suffix is added to a base word. They are appropriate to teach/practice certain rules or principles such as plural -s, third person singular or past tense. The instructor is advised to write on cards words that can be contrasted in terms of a certain rule or principle and encourage learners to sort these cards into categories. As for plural -s, these categories would be of three different allomorphs, namely /s/, /z/ and /ɪz/. Derivational suffix -ly, which is attached to adjectives to form adverbs, can also be instructed accordingly. In this way, learners may be made aware of the differentiation in spelling when -ly suffix is added to an adjective.

**Direct Instruction of Word Roots:** These activities require explicitly instructing or encouraging learners to think about the roots of words which might be borrowed or derived from other languages, mainly Greek and Latin as for English. If learners know meanings of the most common borrowed roots, they might be able to produce novel words using those roots and/or guess the meanings of novel words formed with them. Such an instruction would be relatively better for older and/or more advanced learners.

This type of activities is especially convenient for individuals who are interested in conducting searches within specific texts of such topics as geography, photography and history, which might consist of borrowed words in abundance.

**Word Relatives:** Word relatives aim at promoting learners' conscious awareness of relations among base words or roots and their inflected and/or derived forms. With this purpose, the instructor is to enable learners to recognize that some multi-morphemic words come from the same base word or root and thus are related to each other. These words resemble members of a family in the sense that some of them may look and sound like another, some others may look but not sound like another, while some others may sound but not look like another, and still some others may neither look nor sound like another. Therefore, Apel and Werfel (2014) recommend instructors to use analogy of family members to help learners internalize this relationship among multi-morphemic words and the notion of how they may differ in terms of look and sound. Learners may be provided with a base word (such as act) and asked to brainstorm all the other multi-morphemic words coming from the same base word (such as action, actor, actress, acting). The same process can be repeated with roots (such as vert, which means "to turn in some direction") and learners may come up with all the other related words (such as introvert, introverted, extrovert, extroverted, convert, conversion).

## **METHODS**

### ***Participants***

The participants of this study were 168 Turkish first year university students who were taking intermediate level English courses at a state university in Turkey (age: 18-22). The participants' proficiency level had been determined with a proficiency exam administered at the beginning of the semester the data were collected. The participants had been learning English with an integrated approach to foreign language learning in which English was taught in a way in which language skills and sub-skills are interwoven, and students are encouraged to learn these skills simultaneously.

### ***Instrument***

Morphological Awareness Test (MAT) was the data collection instrument of the study. MAT consists of two sections: Sentence Completion and Word Relation. The Sentence Completion section consists of 27 multiple-choice test items. The purpose of this section is to understand whether the participants are aware of the grammatical and lexical functions of some common derivational suffixes in English. The target words used in this section are pseudo-words that are appropriate for the morphological structure of English. The derivational suffixes used in this test are -tion, -ist, -(i)ty (noun-making suffixes); -ate, -ize, -fy (verb-making suffixes); and -ous, -ive, -al (adjective-making suffixes). These suffixes have been selected for the test because they are among the very common suffixes in English (White, Sowel &

Yanagihara, 1999; Fry & Kress, 2006); -tion, -(i)ty, -ous, -ive and -al are among the most common 20 suffixes that account for 93 percent of occurrences according to a research-based list by White, Sowel, and Yanagihara (1999); and -ist, -ate, -ize and -fy are among other common suffixes that account for seven percent of the occurrences.

The test items in the Sentence Completion section have been taken from Mahony (1993) with minor adjustments. The participants were instructed to choose the best word out of four options formed with the same root (a pseudo-word) but different suffixes in order to complete a sentence with a blank. As can be seen in the following sample test item (Figure 1), once a learner knows what functions the derivational suffixes -ize, -ive, -al and -tion serve, as listed in the options respectively, they can easily complete the sentence with the correct form of the word, indicating that they have some insights into English derivational morphology.

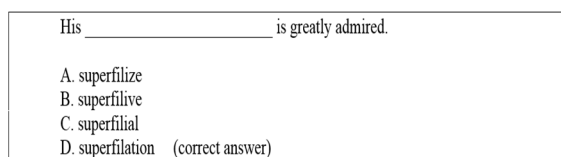


Figure 1. Sample Test Item from the Sentence Completion Section of MAT

In the Word Relation section, the participants were provided with a list of 20 word pairs (real words), and asked whether the second word in each pair comes from the first word or not. As the following sample test items displays (Figure 2), after reading each word pair the

participants circle YES, if they think the second word comes from the first word, or NO if they think the second word does not come from the first word. Three teachers of the participants reviewed the words and confirmed that the participants were familiar with the meaning of all of the words that were used in this section of the test. Nine of the word pairs were morphologically related, while the remaining 11 pairs were morphologically unrelated. Some of the word pairs in this section were taken from Mahony (1993), while some others were designed accordingly by the researcher.

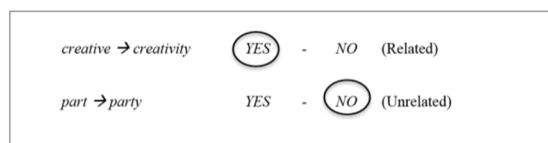


Figure 2. Sample Test Item from the Word Relation Section of MAT

Expert opinion of four professors from the English Language Teaching department of the same university were taken for ensuring the validity of MAT for this research purpose and context; Cronbach's alpha coefficient of MAT was found to be .86 for this study, which indicates a high internal reliability.

### Data Collection and Analysis

During the administration of MAT, the participants were not told that the words used in the Sentence Completion section were pseudo-words, they were told that the words were new to them, and they were reminded to use their knowledge of word endings (suffixes) to be able accomplish the test. For analyzing the data, first

the descriptive statistics (mean scores and standard deviations) were calculated for the sections of MAT and for individual suffixes, then the comparisons between the sections and among the participants were made by using paired-samples t-tests and one-way repeated measures ANOVAs.

## RESULTS

There are 47 items in MAT, 27 of them are in the Sentence Completion Section and 20 of them are in the Word Relation Section. So the highest possible overall score is 47 and the highest possible scores from the Sentence Completion and Word Relation sections are 27 and 20, respectively. Table 1 presents the mean scores for MAT (overall) and its sections. Overall MAT score (30,67 over 47) indicates that the participants of the study have a moderate to high morphological awareness knowledge. The mean scores for the subsections indicate that the participants were better in word relation (17,09 over 20) as compared to Sentence Completion (13,58 over 27).

Table 1. Mean Scores for MAT

	Mean	SD
MAT Overall	30,67	6,35
Sentence Completion	13,58	5,20
Word Relation	17,09	2,74

Table 2 and Table 3 present the mean scores and their comparisons for the three main suffix groups (noun making, verb making, and adjective making), the highest possible score for each group was 9 as there were nine items in MAT related to each suffix group. The tables

show that the participants got the highest mean score from the verb making suffixes, and there was a statistically significant difference between the mean scores of the noun and adjective making suffix groups and the verb and adjective making suffix groups, whereas the difference between the mean scores of the noun and verb making suffix groups was not significant.

Table 2. Mean Scores and ANOVA Comparison of Main Suffix Groups

	Mean	SD	df	F	p
Noun	4,66	1,88	2,	11,88	,000
Verb	4,85	2,18	334		
Adjective	4,11	2,13			

Table 3. Pairwise Comparisons of Main Suffix Groups

Pair	Mean Difference	df	t	p
Noun & Verb	-,185	167	-1,234	,219
Noun & Adjective	,548	167	3,387	,001
Verb & Adjective	,732	167	4,659	,000

Table 4. Mean Scores and ANOVA Comparison of Noun Making Suffixes

	Mean	SD	df	F	p
-tion	2,05	,818	2,	67,63	,000
-ist	1,48	,928	334		
-ty	1,13	,845			

Table 5. Pairwise Comparisons of Noun Making Suffixes

Pair	Mean Difference	df	t	p
-tion & -ist	,565	167	7,114	,000
-tion & -ty	,917	167	12,183	,000
-ist & -ty	,351	167	4,199	,000

Table 4 and Table 5 present the mean scores and their comparisons for the three noun making suffixes, the highest possible score for each suffix was 3 as there were three items in MAT related to each suffix. The tables indicate that the participants got the highest mean score from -tion, and it was followed by -ist and -ty, and there was a statistically significant difference in all pairwise comparisons.

Table 6 and Table 7 show the mean scores and their comparisons for the three verb making suffixes, again the highest possible score for each suffix was 3 as there were three items in MAT related to each suffix. The tables indicate that the participants got the highest mean score from -ate, and it was followed by -ize and -fy, and there was a statistically significant difference in all pairwise comparisons.

Pair	Mean Difference	df	t	p
-ate & -ize	,488	167	5,724	,000
-ate & -fy	1,167	167	12,685	,000
-ize & -fy	,679	167	7,652	,000

Table 6. Mean Scores and ANOVA Comparison of Verb Making Suffixes

	Mean	SD	df	F	p
-ate	2,17	,977	2,	87,302	,000
-ize	1,68	1,005	334		
-fy	1,00	,973			

Table 7. Pairwise Comparisons of Verb Making Suffixes

Table 8 and Table 9 present the mean scores and their comparisons for the three adjective making suffixes, and the highest possible score for each suffix was 3 because

there were three items in MAT related to each suffix. The tables indicate that the participants got the highest mean score from -al, and it was followed by -ive and -ous, and also there was a statistically significant difference in all pairwise comparisons.

Table 8. Mean Scores and ANOVA Comparison of Adjective Making Suffixes

	Mean	SD	df	F	p
-ive	1,43	,945	2,	18,300	,000
-al	1,61	1,020	334		
-ous	1,07	,988			

Table 9. Pairwise Comparisons of Adjective Making Suffixes

Pair	Mean Difference	df	t	p
-ive & -al	-,185	167	-1,998	,047
-ive & -ous	,357	167	4,046	,000
-al & -ous	,542	167	5,860	,000

## DISCUSSION AND CONCLUSION

Results of the study indicate that intermediate-level adult Turkish EFL learners participating in the present study have moderate to high morphological awareness. In other words, intermediate-level adult Turkish EFL learners participating in the present study are aware of syntactic and lexical functions of certain suffixes in English to at least to a moderate extent or more. These findings indicate that the participants in the current study are aware of word morphology to some extent; however, they need more guidance to gain more insights into word morphology and lexical and grammatical functions of word parts. Once they all seem to be aware of the reciprocal

relationship between vocabulary knowledge and reading comprehension, they might be made further aware of the relationship between vocabulary knowledge and word morphology.

The explanation that the participants in the present study have at least moderate awareness of morphological awareness might lie in their English proficiency and the time they have spent learning English so far. They are at intermediate level, indicating that they have made progress towards being proficient EFL learners. They can understand and talk about the main points of familiar topics or the topics of personal interest; they can deal with situations that arise while they are travelling in an English speaking country and they can describe their experiences, dreams and hopes giving reasons (according to CEFR). Besides, results of the present study indicate that they can moderately recognize the morphological structure of complex words, identify the grammatical and lexical functions of certain suffixes and judge whether two words are morphologically related or not. However, considering their English proficiency level, we would expect higher morphological awareness. This relatively lower awareness might be linked to the lack of guidance among adult Turkish EFL learners in terms of intra-word structure. Apparently, they need more guidance to recognize the internal structure of a word and identify the root and the affixes. Additionally, they need to be shown how to form new words applying the word formation rules in English.

In addition, the present study reveals that intermediate-level adult Turkish EFL learners participating in the present study performed better in the Word Relation task than in the Sentence Completion task. This means that intermediate-level adult Turkish EFL learners participating in the present study can judge whether a morphologically complex word comes from a simple word better than they identify the lexical and grammatical functions of certain derivational suffixes in English. When we look at the items in the Word Relation task (Section II of the Morphological Awareness Test), we notice that they measure a basic facet of morphological awareness. These items interrogate solely whether or not EFL learners have a superficial knowledge of intra-word structure in English.

Also, intermediate-level adult Turkish EFL learners participating in the present study showed the best performance in the verb making suffixes. We expected the best performance in the case of noun making derivational suffixes since they are considered as the simplest among the parts of speech and thus the first ones taught to students in primary school. However, this finding remarks that Turkish EFL learners might be making use of verb making derivational suffixes more frequently than any others; they might often encounter and be engaged in verb making derivational suffixes and thus are more familiar with and aware of their lexical and grammatical functions. The participants scored the most poorly in the case of adjective making



derivational suffixes, which might be explained by that foreign language learners generally encounter with and use nouns and verbs more than the other parts of speech.

Lastly, intermediate-level adult Turkish EFL learners participating in the present study showed significantly more awareness for the verb making derivational suffix –ate than –ize and –fy. They showed significantly more awareness for the noun making derivational suffix –tion than –ty and –ist. They showed significantly more awareness for the adjective making derivational suffix –al than –ive and –ous. This differentiation of the performance of the participants in terms of the suffixes may also be attributed to their experience with suffixes and word formation through their studies at preparatory school and the course-books. One crucial thing that this finding signals is that Turkish EFL learners display different performance in recognizing and using suffixes properly in accordance with the individual suffixes even in the case of very common ones. This indicates that they need to be provided with a wider array of suffixes profoundly to be more proficient in identifying word structure and forming new words in English. In other words, Turkish EFL learners should be provided with derivational suffixes broadly and deeply to achieve the goal of comprehending and benefitting from intra-word structure in English.

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