

# Navigating Specificity and Countability: Insights Into L1 Arabic Speakers' Use of L2 English Definite Articles

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**Abstract**—Despite the frequency with which they are used in the English language, English articles pose challenges for second language (L2) acquirers due to the relational complexities between their semantic and syntactic elements. This study explored whether the interplay between semantic features, proficiency levels and countability played a role in understanding such challenges. After testing to determine their proficiency levels, data was collected from forty-five Saudi Arabic-speaking university-level students who were learning English, using a multiple-choice article task. This was designed to examine article use across singular, plural and mass nouns in specific and non-specific definite contexts. The participants were divided into three groups, depending on their proficiency level (beginner, elementary and lower-intermediate). It was found that there was an interaction between proficiency, countability and semantic features, in that: a) article use improved with proficiency; b) the beginners' group frequently omitted articles, especially with singular nouns; c) the elementary and lower-intermediate groups struggled with mass and singular nouns; and d) all the groups wrongly based their use of articles in plural contexts on the specificity value.

**Index Terms**—Arabic, countability, definiteness, English articles, L2 acquisition

## I. INTRODUCTION

Articles are among the most frequently occurring lexical items in the English language, and of these, the most frequently used is '*the*' (Leech & Rayson, 2014). English articles have low phonological status and are often not clearly pronounced in L2 input (Goad & White, 2009). This means that learners of English may struggle to acquire them due to their phonological features as well as their complex semantic and morphosyntactic properties. According to previous research findings, a number of factors may influence the use of articles, including first language L1 transfer of semantic (Alzamil, 2018; Ionin et al., 2008; Lena, 2023), syntactic (Herms, 2023) or phonological features (Goad & White, 2006; Goad & White, 2009) as well as countability (Snape, 2008) and proficiency levels (Qian et al., 2021).

Influential semantic-based article studies by Ionin and colleagues (i.e., Ionin et al., 2004; Ionin et al., 2007; Ionin et al., 2009; Ionin et al., 2008) have paved the way for greater consideration of the L2 acquisition of articles from a semantic point of view. In 2008 they developed the Fluctuation Hypothesis (FH). According to the FH, the two semantic settings are definiteness and specificity. English and many other languages, such as Arabic, have articles whose use is based on definiteness values. Those whose own language uses articles will base their L2 article use on their L1 article semantics. Meanwhile, it will be difficult for L2 speakers whose L1 does not use articles to use them correctly because they do not know the appropriate article semantic settings. Yet studies that tested Ionin et al.'s hypothesis have not always arrived at results consistent with its predictions. That is, L1 speakers of languages that have similar article systems and semantics to English still struggle to use English articles (Alzamil, 2018; Zdorenko & Paradis, 2008).

Countability is thought to affect L2 learners' use of English articles (Derkach & Alexopoulou, 2024). Lardiere (2004) proposed that the English definite article *the* is not sensitive to countability which means that it is less complex than indefinite articles. However, this relative lack of complexity does not translate into easy L2 acquisition of *the* by L1 Arabic speakers (Almahboob, 2009; Alzamil, 2018). In fact, a number of researchers found that the L2 use of *the* was more challenging than *a* and  $\emptyset$  (Alhaisoni et al., 2017; Alhothaly, 2020). These findings – especially in relation to the use of *the* – have been largely overlooked by L2 researchers.

This study therefore attempts to highlight the need for a more comprehensive approach to tackling how L2 learners acquire English articles. The study examines the potential interaction between countability, semantic features and different proficiency levels among Saudi Arabic L1 speakers' use of the English article *the*. This could provide future researchers with greater insight into the reasons for the lack of reliability of earlier research on the L2 acquisition of articles, by exploring the way *the* is used by L2 speakers in different semantic contexts for each type of noun (singular, plural and mass). The research sought to answer three questions:

1. Do increasing proficiency levels influence the use of *the*?
2. Does the L2 use of *the* vary due to countability?
3. Does specificity interact with the use of *the*?

## II. LITERATURE REVIEW

### A. Article Semantics

This section describes how countability (singular, plural and mass) and semantic features interact with each other in English and Arabic.

#### English

English article-use varies by countability as well as semantics (Derkach & Alexopoulou, 2024). Semantically, *the* is definite and  $\emptyset$  and *a* are indefinite (Hajjar, 2024). Countability is also important in that *the* is used with all three types of nouns; *a* is used only in conjunction with singular nouns, while  $\emptyset$  comes into play in relation to both plural and mass nouns. English article use is closely associated with the semantic interpretation of a context. Ionin's (2004) semantic framework is one of the most influential semantic accounts of the uses of articles (Arıbaş & Cele, 2021). It claims that in any language that uses articles, the semantic features of definiteness and specificity will impact article use. Definiteness will depend on whether both speaker and hearer assume the existence of individuality, while a speaker's *intention to refer* will determine specificity (Ionin et al., 2004). The definiteness value of a context will determine article use in English, Modern Standard Arabic (MSA) and all spoken varieties of Arabic. This means that definite articles are associated with definiteness. Because of this, Ionin et al. (2004) proposed – in relation to their hypothesis – that speakers of a language that adopts definiteness in the use of articles will not find it difficult to use articles accurately in L2 languages that have the same semantic feature. Conversely, speakers of languages that do not use articles will not be able to link articles to their appropriate semantic contexts. This is evident in contexts that have opposing features [+definite, -specific] and [-definite, +specific].

What follows is a list of English article uses with each of the three types of nouns. All the contexts are definite, so only the specificity status is identified.

#### Specific

1. I need to see *the manager*. She is my sister. (singular)
2. I need to see *the managers*. They are my sisters. (plural)
3. I bought *the honey*. It was expensive. (mass)

#### Non-specific

1. I need to see *the manager*. I do not know her. (singular)
2. I need to see *the managers*. I do not know them. (plural)
3. I need to buy *the honey*. I hope it is cheap. (mass)

It can be noted from the examples that the English articles are not linked to the specificity value.

#### Arabic

MSA is the official language of communication in Saudi Arabia (Van Mol, 2003). Conversely, spoken Arabic dialects are not usually used in official communication. Saudi Arabic has different dialects, such as Hijazi and Najdi. Saudi dialects are syntactically and morphologically similar to each other (Almahboob, 2009) but not to MSA, to the extent that MSA realizes case markings, which is not the case with Saudi Arabic dialects. The variations between MSA and spoken Arabic dialects do not affect article use.

MSA and Saudi Arabic have the indefinite  $\emptyset$  and the definite *al-*, of which the latter is a bound morpheme added to nouns to make them definite (Hajjar, 2024). Articles in MSA and spoken Arabic dialects are not sensitive to case, gender or number (Lyons, 1999). English and all spoken Arabic dialects are identical in that *al-* is used in definite contexts (Ivanov & Tryzna, 2020). The relationship between Arabic articles and both countability and specificity is described below. Examples are provided for both MSA and Saudi Arabic to show that they are identical with regard to article use.

#### Specific

##### MSA

1. Ahtadzū            an ara            *almudirati*.            hia    aux̄ti.  
Need-I-NOM    to see            *the-manager-FEM-GEN*.    she    sister-my. (singular)  
'I need to see *the manager*. She is my sister.'
2. Ahtadzū            an ara            *almudiraati*.            huna    axw̄ati.  
Need-I-NOM    to see            *the-managers-FEM-GEN*.    they    sisters-my. (plural)  
'I need to see *the managers*. They are my sisters.'
3. İhtadz̄tu    an    ashtaria            *alḥasala*.    kana    yalian.  
Needed-I    to    bought-I    *the-honey-ACC*.    it-was    expensive-ACC. (mass)  
'I needed to buy *the honey*. It was expensive.'

##### Saudi Arabic

1. Ahtadz̄    ashuf            *almudirah*.            hi    aux̄ti.  
Need-I    see            *the-manager-FEM*.    she    sister-my. (singular)  
'I need to see *the manager*. She is my sister.'
2. Ahtadz̄    ashuf            *almudirat*.            hum    axw̄ati.  
Need-I    see            *the-managers-FEM*.    they    sisters-my. (plural)  
'I need to see *the managers*. They are my sisters.'
3. İhtadz̄t            ashtari            *alḥasal*.            kan    yali.

Needed-I bought-I *the-honey*. it-was expensive. (mass)

'I needed to buy *the honey*. It was expensive.'

Non-specific

MSA

1. Aħtadzu an ara *almudirati*. la aħrifuha.  
Need-I-NOM to see *the-manager-FEM-GEN*. no know-her. (singular)  
'I need to see *the manager*. I do not know her.'
2. Aħtadzu an ara *almudiraati*. la aħrifhum.  
Need-I-NOM to see *the-managers-FEM-GEN*. no know-them. (plural)  
'I need to see *the managers*. I do not know them.'
3. Aħtadzu an ashtaria *alħasala*. argo an ykoona raxiħan.  
Need-I to buy-I *the-honey-ACC*. hope-I it will-be cheap. (mass)  
'I need to buy *the honey*. I hope it is cheap'

Saudi Arabic

1. Aħtadħ ashuf *almudirah*. ma aħrifħa.  
Need-I see *the-manager-FEM*. no know-her. (singular)  
'I need to see *the manager*. I do not know her.'
2. Aħtadħ ashuf *almudirat*. ma aħrifhum.  
Need-I see *the-managers-FEM*. they know-them. (plural)  
'I need to see *the managers*. I do not know them.'
3. Aħtadħ ashtari *alħasal*. atmana ykoon raxis.  
Need-I buy-I *the-honey*. hope-I will-be cheap. (mass)  
'I need to buy *the honey*. I hope it is cheap.'

It can be observed from the above examples both that the specificity setting has no influence on the sentence structure and that Arabic is similar to English.

### B. Empirical Studies

This section discusses studies that explore how L2 learners of English use articles, focusing on those that examined the L2 uses from a semantic perspective. Previous research has addressed the claims of the FH. However, a number of studies have examined semantics and article use by L1 speakers of languages that have article systems and semantic features similar to English, and found article use to be sensitive to the specificity feature. These studies, along with those that support the FH, are discussed in this section.

Mohanna (2014) examined English article use by 274 Saudi university-level students, with an average age of twenty years, who specialized in English. Proficiency tests were not conducted. The participants were given fifty minutes to write English compositions on different topics and data was drawn from these. Mohanna found that the participants omitted and substituted English articles but did not adopt any semantic framework with regard to the classification of their errors. Although this is understandable given that it is not possible to identify specificity values in uncontrolled written tasks (Alzamil, 2018), it is possible that the use of more controlled tasks could reveal more details about students' use of English articles.

Ionin et al. (2008) carried out one of the most influential studies in the literature on the relationship between article use and semantics. They recruited twenty Spanish and nineteen Russian speakers. Spanish uses articles and Russian does not. The participants were grouped according to their proficiency level (beginner, intermediate or advanced) and data was gathered from two written tasks. All the target nouns were singular. Ionin et al. found that the L1 Russian speakers associated the use of *the* and *a* with specificity but observed no evidence of this in the L1 Spanish speakers' article selection. However, as they became more proficient, the Russian speakers started to recover from this difficulty. These findings have been backed up by a number of other studies, including those of Snape (2008) and Momenzade (2014), which are discussed below.

Snape (2008) examined L2 learners' potential association of English articles with semantic and number features. The sample consisted of thirty L1 Japanese and thirty L1 Spanish speakers who were students at a university in the UK. Both languages have articles. Spanish distinguishes between countable and mass nouns, but Japanese does not. This may mean that they associate articles with certain noun types. Participants were given an Oxford Quick Placement Test (OQPT) and categorized as intermediate or advanced. Two written tasks were used. Snape (2008) found that L1 Japanese speakers made omission errors with *the* in plural and mass contexts. L1 Spanish speakers made fewer omission errors and those that they did make were mainly with definite plural nouns. Despite the fact that Spanish uses articles, L1 Spanish speakers displayed variation in their use of articles. Both groups made fewer errors as they became more proficient.

Momenzade et al. (2014) examined English article use by forty-three L1 Persian speakers, who were required to take the OQPT, and were placed into groups (elementary, intermediate or advanced) on the basis of their results. Because Persian does not use articles, participants were expected to fluctuate in line with the FH. Momenzade et al. then administered two tasks – a grammaticality judgement task and a translation task – which required participants to use articles with singular and plural nouns in various semantic contexts. They found that the participants had equal difficulty associating English articles with definiteness and made a high number of omission errors, which is as expected given that

their L1 does not use articles. However, their misuse of articles decreased as they became more proficient. As with the studies discussed above, no comparisons were carried out between the types of nouns.

Working with a sample of ninety-six university-level, Saudi Arabic-speaking students who were studying English at a Saudi University, Almahboob (2009) found that L1 Arabic speakers were successful at linking English articles to the appropriate semantic setting (i.e., definiteness). On the basis of an OQPT, participants were classified as elementary, intermediate or advanced. The main objective of the study was to investigate whether article use is associated with semantic features. Accordingly, participants were given article-based written tasks that used all types of nouns. The author found that his advanced participants successfully used *the* regardless of the semantic value of a context. However, he did not compare the use of *the* across the types of nouns.

Ivanov and Tryzna (2020) carried out a similar study. They investigated 257 L1 Kuwaiti Arabic learners of English. Kuwaiti Arabic grammaticalizes articles in a similar way to other Arabic varieties. Although no information was provided about participants' academic backgrounds, they were grouped into intermediate and advanced proficiency levels. Using two types of nouns – singular and plural – the study looked at whether their use of English articles was sensitive to definiteness and/or specificity. Ivanov and Tryzna found that participants did not use articles on the basis of specificity. Moreover, both groups exhibited a high degree of accuracy in their use of *the*, with the advanced speakers being near native. However, they did not compare participants' use of *the* across noun types in definite contexts and did not include mass nouns. Additionally, the FH relates to an initial state and their participants were relatively proficient.

Alzamil (2018) found that fluctuation affects L1 Arabic speakers' English article use. She recruited seventy-eight Saudi Arabic female secondary-level students, who were EFL learners in Saudi Arabia. An OQPT placed them at the elementary level. Two types of written task were used to examine all types of nouns in all semantic contexts. The goal was to explore the teaching of English articles and the study opted for a longitudinal approach. The results achieved after administration of teaching treatment sessions are not reported here, however. Alzamil found that the participants' article use was based on specificity. These findings contradicted the FH because it does not account for L1 speakers of languages that have articles and adopts the definiteness semantic feature to associate article use with specificity. The study analysed each type of noun separately; that is, the author did not compare the data on singular, plural and mass nouns to determine if there was a correlation between noun type and article use, as the main focus was to examine the role of teaching. There was only one proficiency level and the study's findings cannot be transferred to higher or lower proficiency levels.

It can be seen from the above that article use is influenced by L1 backgrounds, noun types, semantic features and language proficiency. The aim of the current study is to address a gap in the literature concerning the potential correlation between these factors and the next section outlines the methodology used to achieve this.

### III. METHODOLOGY

The study recruited forty-five participants who were university-level students at a Saudi university aged between 18 and 21. There were twenty-four males and twenty-one females, who were enrolled in different majors. Students who majored in English or other fields that required students to receive a substantial amount of formal English teaching, such as medicine, were not approached to participate. Those who had studied abroad or been exposed to English at a young age were also excluded on the basis that their understanding and use of English could well be significantly different from the average and that their participation might skew the sample or findings as a result.

Data was gathered using a multiple-choice article task and a widely used proficiency test – the OQPT – (Momenzade et al., 2014; Namaziandost et al., 2020; Snape, 2008) which has a range of proficiency levels (beginner, elementary, lower intermediate, upper intermediate, advanced and very advanced). The multiple-choice article task was adopted and adapted from other widely used tasks (Snape, 2006) and consisted of seventy-two short dialogues (thirty-six definite, thirty-six indefinite). Each dialogue contained a blank, which participants were instructed to complete by choosing between the three English articles. The rationale for this task was that it allowed the research to control for countability and the semantic features of the contexts to address the research questions. Other less-controlled tasks do not allow this (Almahboob, 2009). Consistent with the aim of the present study, only definite contexts were addressed. The multiple-choice article task contained singular, plural and mass nouns in two semantic contexts (specific and non-specific) and in each context there were six dialogues. Although it has been used in many previous studies, the task was emailed to three native English speakers, to check for clarity. These native English speakers – all from the UK – completed the tasks and confirmed that the task was clear and appropriate.

The experiment took place in a classroom setting in two separate sessions. With the help of other teachers, the participants took the OQPT first, and to avoid any fatigue, then completed the multiple-choice article task on a different day. The OQPT is a timed proficiency test and took the participants thirty minutes, and the article task took them less than an hour. There were three proficiency groups: beginner (BG), elementary (EG), and lower intermediate (LiG). More participants were placed into the beginner and elementary levels than into the lower intermediate, but to equalize the number of students in each group, and to facilitate the data analyses, they were then randomly screened out until there were fifteen participants in each group, which is considered reliable and valid in the literature of language learning (Norouzian, 2020). The study deliberately excluded participants at advanced proficiency levels; their linguistic competence and performance are not straightforward to analyse because it is challenging to separate the many factors that helped them reach this level.

All the participants signed consent forms and were informed that they could leave at any time and that their identities would remain anonymous. The researcher obtained institutional ethical approval from the relevant committee.

IV. RESULTS

This section reports the study’s findings from the multiple-choice article task in relation to article use in definite contexts. First, it reports the descriptive statistics related to means and standard deviations before presenting in turn the inferential statistics that addressed each of the three research questions.

The two graphs below show the extent to which *the* was used accurately in both specific and non-specific contexts.

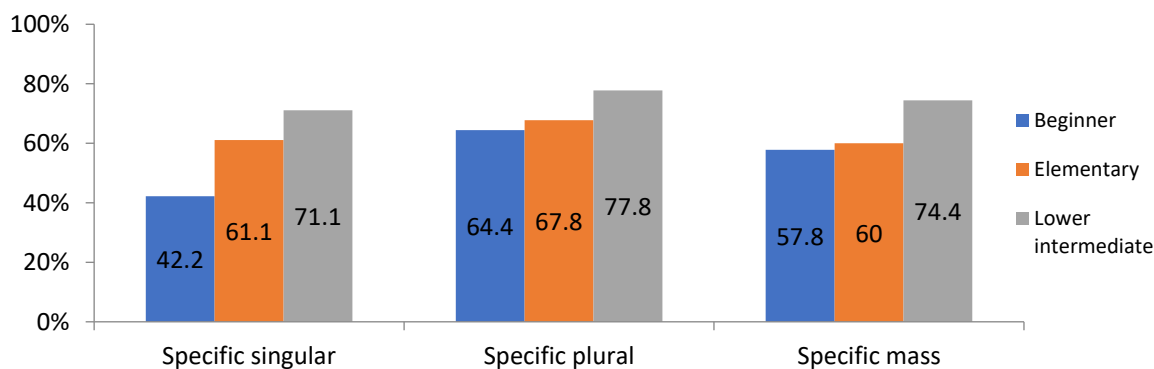


Figure 1. Mean Percentages of Accurate Use of the Specific Contexts

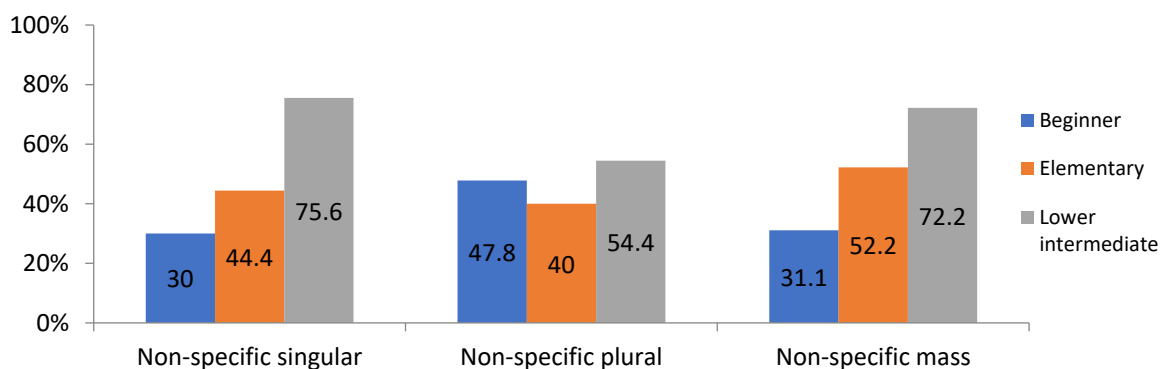


Figure 2. Mean Percentages of Accurate Use of the Non-Specific Contexts

The graphs show that noun types, specificity and proficiency levels all had an impact on the participants’ accuracy levels. Their detailed article choices are reported below (including the mean percentage and standard deviation for each).

TABLE 1  
MEAN PERCENTAGES AND STANDARD DEVIATIONS (SPECIFIC CONTEXTS)

Proficiency level	Singular			Plural			mass		
	The	A	Ø	The	A	Ø	The	A	Ø
Beginner (BG)	42.2%	8.9%	48.9%	64.4%	5.6%	30%	57.8%	10%	32.2%
	15.3	10.7	14.7	15.3	10.3	12.9	13.9	12.3	14.7
Elementary (EG)	61.1%	16.7%	22.2%	67.8%	4.4%	27.8%	60%	21.1%	18.9%
	19.6	10.9	19.6	23.1	7.6	20.6	21.6	22.2	8.6
Lower Intermediate (LiG)	71.1%	22.2%	6.7%	77.8%	3.3%	18.9%	74.4%	13.3%	12.2%
	17.2	16.3	12.3	15.0	6.9	16.5	16.5	15.7	11.7

The table illustrates that the participants’ target and non-target use of articles varied between the different proficiency levels and noun types. The BG’s omission errors were higher than other groups. The overall accuracy level improved with higher proficiency.

TABLE 2  
MEAN PERCENTAGES AND STANDARD DEVIATIONS (NON-SPECIFIC CONTEXTS)

Proficiency level	Singular			Plural			Mass		
	The	A	Ø	The	A	Ø	The	A	Ø
Beginner (BG)	30%	16.7%	53.3	47.8%	5.6%	46.7%	31.1%	11.1%	57.8%
	12.9	18.9	21.1	18.8	10.3	20.1	15.3	10.3	15.3
Elementary (EG)	44.4%	22.2%	33.3%	40%	7.8%	52.2%	52.2%	21.1%	23.3%
	24.1	15	18.9	13.8	8.6	13.9	12.4	16	15.2
Lower Intermediate (LiG)	75.6%	20%	4.4%	54.4%	3.3%	42.2%	72.2%	8.9%	15.6%
	12.4	11.3	7.6	16.0	6.9	17.7	17.4	10.7	13.3

The table indicates that non-specific contexts posed more challenges than specific ones. This can be seen in the fact that the BG and EG used *the* less than the LiG. These visual observations are statistically investigated below.

First, the data was examined for normality. The sample size is small; therefore, the Shapiro-Wilk test was employed, as recommended by Gravetter et al. (2021), which revealed that the data was non-normal and led to the use of non-parametric tests. The Bonferroni correction was implemented ( $p \leq .016$ ) (Abdi, 2007). The tables below report the results between  $p \leq .016$  and the standard threshold  $p < .05$  to show how few they are and to address a concern that the Bonferroni correction may be too conservative (Abdi, 2007).

To address the role of proficiency, all the article selections made by members of each group (BG, EG and LiG) were statistically compared in each semantic context and for each type of noun.

TABLE 3  
MANN-WHITNEY U: ARTICLE USAGE AND PROFICIENCY LEVELS (SPECIFIC CONTEXTS)

Noun	Beginner vs. Elementary			Beginner vs. Lower Intermediate			Elementary vs. Lower Intermediate		
	The	A	Ø	The	A	Ø	The	A	Ø
Singular	50.000	n.s. <sup>a</sup>	33.000	25.500	59.000	6.000	n.s.	n.s.	57.000
	$p = .009$		$p = .001$	$p < .001$	$p = .026$	$p < .001$			$p = .021$
Plural	n.s.	n.s.	n.s.	59.500	n.s.	n.s.	n.s.	n.s.	n.s.
				$p = .026$					
Mass	n.s.	n.s.	50.500	48.500	n.s.	35.500	n.s.	n.s.	n.s.
			$p = .009$	$p = .007$		$p = .001$			

<sup>a</sup> n.s. has been used when no significant differences were found at the standard ( $p < .05$ ) and Bonferroni ( $p \leq .016$ ) significance levels.

The Mann-Whitney U tests showed that the EG and LiG outperformed the BG in both singular and mass contexts. However, all the groups demonstrated similar article use in plural contexts. The EG and LiG performed similarly in specific contexts, and all the groups were similar in the use of *a*.

TABLE 4  
MANN-WHITNEY U: ARTICLE USAGE AND PROFICIENCY LEVELS (NON-SPECIFIC CONTEXTS)

Noun	Beginner vs. Elementary			Beginner vs. Lower Intermediate			Elementary vs. Lower Intermediate		
	The	A	Ø	The	A	Ø	The	A	Ø
Singular	n.s.	n.s.	50.000	1.500	n.s.	9.500	30.500	n.s.	23.000
			$p = .009$	$p < .001$		$p < .001$	$p < .001$		$p < .001$
Plural	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	60.000	n.s.	n.s.
							$p = .029$		
Mass	35.000	n.s.	12.000	9.000	n.s.	4.000	39.500	n.s.	n.s.
	$p = .001$		$p < .001$	$p < .001$		$p < .001$	$p = .002$		

Similar to the specific contexts, the three groups performed similarly in non-specific plural contexts. They also used *a* in a similar way in all the contexts. The EG and LiG outperformed the BG in singular and mass contexts. Moreover, the LiG used articles more accurately than the EG in these contexts.

The next section addresses the second research question: does the L2 use of *the* vary due to countability? This question, which is about participants' article use in relation to noun types, was addressed by comparing article selection in each proficiency group across the three noun types.

TABLE 5  
WILCOXON SIGNED-RANKS: ARTICLE USAGE BY NOUN TYPES (SPECIFIC CONTEXTS)

Proficiency level	Singular vs. Plural			Singular vs. mass			Plural vs. mass		
	The	A	Ø	The	A	Ø	The	A	Ø
Beginner (BG)	$z = -2.571$	n.s.	$z = -2.173$	$z = -2.470$	n.s.	$z = -2.931$	n.s.	n.s.	n.s.
	$p = .012$		$p = .030$	$p = .014$		$p = .003$			
Elementary (EG)	n.s.	$z = -2.495$	n.s.	n.s.	n.s.	n.s.	n.s.	$z = -2.431$	n.s.
		$p = .013$						$p = .015$	
Lower Intermediate (LiG)	n.s.	$z = -2.968$	$z = -2.515$	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
		$p = .003$	$p = .003$						

The BG showed more article accuracy in plural and mass contexts than in singular ones. The EG used *a* more frequently in singular and mass contexts than in plural contexts. The LiG used *a* more frequently and  $\emptyset$  less frequently with singular nouns than with plural nouns.

TABLE 6  
WILCOXON SIGNED-RANKS: ARTICLE USAGE BY NOUN TYPE (NON-SPECIFIC CONTEXTS)

Proficiency level	Singular vs. Plural			Singular vs. mass			Plural vs. mass		
	The	A	$\emptyset$	The	A	$\emptyset$	The	A	$\emptyset$
Beginner (BG)	$z=-2.402$ $p=.016$	n.s.	n.s.	n.s.	n.s.	n.s.	$z=-2.833$ $p=.005$	n.s.	$z=-2.015$ $p=.044$
Elementary (EG)	n.s.	$z=-2.544$ $p=.011$	$z=-2.699$ $p=.007$	n.s.	n.s.	n.s.	$z=-2.110$ $p=.035$	n.s.	$z=-3.068$ $p=.002$
Lower Intermediate (LiG)	$z=-2.952$ $p=.003$	$z=-3.066$ $p=.002$	$z=-3.432$ $p=.001$	n.s.	$z=-2.517$ $p=.012$	$z=-2.239$ $p=.025$	$z=-2.282$ $p=.022$	n.s.	$z=-2.923$ $p=.003$

The BG demonstrated greater accuracy with the use of *the* in plural contexts than in singular and mass ones. The EG omitted articles more with plural nouns than with singular and mass nouns and used *a* more with singulars than with plurals. The LiG showed a higher accuracy level in using *the* with singular nouns compared to plural nouns. They also used *a* more with singular nouns than with plural and mass nouns and made more omission errors with plural nouns than with mass nouns.

To address the third question related to semantic features – does specificity interact with the use of *the*? – participants' article use at each proficiency level was compared in specific vs. non-specific contexts.

TABLE 7  
WILCOXON SIGNED-RANKS: ARTICLE USAGE AND SPECIFICITY (PLURAL)

Proficiency level	The	A	$\emptyset$
Beginner (BG)	$z=-2.948$ $p=.003$	n.s.	$z=-2.457$ $p=.014$
Elementary (EG)	$z=-2.970$ $p=.003$	n.s.	$z=-2.966$ $p=.003$
Lower Intermediate (LiG)	$z=-2.553$ $p=.011$	n.s.	$z=-2.376$ $p=.016$

The table shows that all the groups selected *the* more and  $\emptyset$  less with specific plural nouns than with their non-specific counterparts.

There were no specificity effects in singular contexts. The BG demonstrated greater use of *the* ( $z=-3.077$ ,  $p=.002$ ) and lesser use of  $\emptyset$  ( $z=-2.956$ ,  $p=.003$ ) with specific than with non-specific mass nouns.

## V. DISCUSSION

The results demonstrated notable differences in article use that can be attributed to the interplay between proficiency levels, noun types and specificity values. In this section, these findings are further explored by comparing them with previous studies and exploring their implications for L2 article acquisition. Each of the three research questions is discussed in turn.

1. Do increasing proficiency levels influence the use of *the*?
2. Does the L2 use of *the* vary due to countability?
3. Does specificity interact with the use of *the*?

Concerning the first question, article use improved as the proficiency level increased, aligning with the findings of studies by Almahboob (2009), Ionin et al. (2008), Ivanov and Tryzna (2020), Momenzade et al. (2014) and Snape (2008). Nevertheless, this improvement seems to interact with noun types and the specificity setting. For example, the three groups performed similarly in plural contexts. Additionally, the EG and LiG exhibited greater accuracy levels than the BG in mass and singular contexts. The EG and LiG performed similarly in specific contexts. However, the LiG surpassed the EG in article use in relation to the use of *the* and  $\emptyset$  in non-specific singular and mass contexts. These findings reveal the impact of including all noun types in different semantic contexts, a factor overlooked by other studies (e.g., Ionin et al., 2008; Ivanov & Tryzna, 2020; Momenzade et al., 2014).

For the second question, the findings indicate that article use in all three groups was associated with noun types, which is in line with Snape's (2008) data. These findings emphasize the value of including noun types as a variable, something which was not addressed in previous studies (e.g., Al-Mohanna, 2014; Alzamil, 2018; Ionin et al., 2008; Ivanov & Tryzna, 2020). When using *the*, the BG was not as accurate in specific, singular contexts as in plural and mass counterparts. In non-specific contexts, group members were more accurate in the plural than the singular and mass contexts. They also made a high number of omission errors. The EG and LiG used *a* more frequently in singular and mass contexts than in plural counterparts. Both groups were similar in their use of *the* with all noun types, yet the LiG were still less accurate in the use of *the* with non-specific plurals than with other singular and mass counterparts. This was an unexpected finding,

given that the other – less proficient – groups found plural contexts the least challenging. The BG struggled the most with singular nouns in that they made a significant number of omission errors. Since Arabic does not have a marker that is the phonological equivalent of *a* in English, it may be possible to explain this in terms of L1 transfer. The EG and LiG demonstrated a high nontarget use of *a* which can be attributed to them starting to incorporate *a* with singular nouns as a potential grammatical choice. They did the same with mass nouns, which are similar to singular nouns but are treated like plural nouns in a syntactical sense.

Regarding the third question, the FH does not assume that L1 speakers of languages that use articles are influenced by the specificity value. However, the present study found that L1 Arabic speakers frequently chose articles on the basis of specificity, which is consistent with Alzamil (2018) but which does not align with the results achieved by other researchers, including Ionin et al. (2008), Ivanov and Tryzna (2020), and Snape (2008). It is noteworthy that the three groups all showed sensitivity to plural nouns, always using *the* more and  $\emptyset$  less in specific plural contexts than they did in non-specific contexts. The BG demonstrated the same in mass contexts. It is important to mention that the FH applies to an early stage of L2 acquisition and that a number of the FH-based studies discussed here involved L2 English learners of a more advanced level (e.g., Snape, 2008), although this was not the case with Alzamil's (2018) study, which was carried out with low-proficiency learners.

How, then, can we answer the key question: why did the participants demonstrate this sensitivity, but only with plural and mass nouns? As Arabic does not have a phonologically equivalent marker for *a*, the answer is that, depending on definiteness, the articles *the* and  $\emptyset$  apply only to plural and mass nouns, whereas *the* and *a* apply to singular ones. Therefore, the participants struggled to decide which article was grammatically correct with singular nouns as they were caught between *the* and *a* in addition to what they may well have brought with them from their L1 ( $\emptyset$ ). This struggle may have hindered their sensitivity to specificity in singular nouns and nouns that they treat as singular (i.e., mass nouns).

Based on these findings, L1 transfer effects are not straightforward. The fact that there was a high number of omission errors with singular nouns and that *the* and  $\emptyset$  were associated with plural nouns, could indicate L1 transfer. However, not transferring article semantics and being affected by specificity cannot be explained in this way. One interpretation could be that the participants relied on their cognitive problem-solving skills. This can be seen in the increasingly frequent use of *a* by the EG and LiG and the high frequency of the use of  $\emptyset$  by the BG.

The findings demonstrate the necessity of including learners' L1 backgrounds, countability, proficiency and semantic features as variables when conducting studies of L2 article use and how including them contributes to the understanding of the way these variables interact with each other. If the study had: a) included only singular nouns (e.g., Ionin et al., 2008); b) selected participants who were studying English in the UK (e.g., Snape, 2008) or majoring in English (e.g., Almahboob, 2009); or c) recruited participants from only one proficiency level (e.g., Alzamil, 2018), it might have led to different findings. That is, similar to Ionin et al. (2008), this study found no specificity effects with singular nouns, and participants who are specialized in English tend to use their metalinguistic knowledge, which also leads to a failure to be sensitive to specificity (e.g., Almahboob, 2009; Snape, 2008).

## VI. CONCLUSION

This research examined the L2 use of English articles by L1 Arabic speakers from different proficiency levels to explore whether their proficiency level interacts with noun types and semantic features to affect their article use. The findings demonstrated that English article use improved with proficiency. It was also influenced by noun types to the extent that the BG frequently made omission errors and that all groups exhibited relatively high accuracy levels with plural nouns. The groups were sensitive to the specificity setting in plural and mass contexts. This indicates that the types of errors made by L1 Arabic speakers are interwoven with learners' proficiency, noun types and semantic features. This highlights the need to adopt methodological diversity to capture article use complexities.

This study encountered limitations that should be taken into account in future research. First, it used only one data collection instrument. Employing more instruments could improve the validity of the results, although controlling for all variables is not always possible in less controlled tasks. Second, it recruited participants from only one L1 background, and including native speaker of more languages would have facilitated comparison of other L2 learners' article use with that of L1 Arabic speakers. Finally, the study examined definite article uses, and future research should also consider covering indefinite article use.

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