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The Morphosyntactic Features of the Language of Jordanian Arabic-Speaking Children With Developmental Language Disorders

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Abstract—**This paper investigated the morphosyntactic features in the speech of Arabic-speaking children with Developmental Language Disorders. Four aspects of morphosyntax were examined: tense, subject-verb agreement, the use of determiners and the use of prepositions. A total of fifty Jordanian Arabic-speaking children participated in the study. The participants were divided into two groups: a group of children with Developmental Language Disorders, and an age-matched group of normally developing children. The primary data collection tools included the Picture Description Task, the Spontaneous Speech Sample, and the Storytelling Activity with a Series of Pictures. The results showed significant differences between both groups regarding the correct usage of verb tenses, subject-verb agreement, articles, and prepositions**.

Index Terms—**developmental language disorders, agreement, determiners, prepositions, morphosyntactic deficits**

I. Introduction

In the literature, the term Developmental Language Disorders (DLD) usually refers to delay and/or specific disorders that take place during the acquisition of grammar. Since language represents a level that is distinct from speech, communication, and cognition, DLD by definition must not be accompanied by other neurological or physical deficiencies, such as hearing loss, mental retardation, motor-articulatory impairment, or psycho-emotional disorders (Tsimpli & Stavrakaki, 1999; Leonard, 2017). Detection of these disorders is usually manifested as delay in babbling, first-word production, or limited vocabulary and sentence structure. One of the major aspects of DLD is the occurrence of morphosyntactic deficits (Bishop, 1994). It follows that children with DLD are expected to exhibit production difficulties in some domains of inflectional morphology, as well as understanding problems with reference to specific syntactic structures. In particular, children with DLD frequently miss or misuse grammatical function words, nominal declensions, and verbal conjugations that convey person, number, gender case, and tense (Bliss, 1989; Clahsen, 1989; Gopnik & Crago, 1991; Leonard et al., 1992).

Different languages show considerable variability in terms of the errors produced by children with DLD; to capture this wide variability, different models have been proposed. These models focused on the mechanisms employed by children with DLD, causes of the problem, and the main features of DLD (Rice, 1996). For example, the Surface Account Hypothesis (SA) (Leonard et al., 1992, 1997), attributes the problem to 'processing limitations' that limit the child's capability to figure out the role of grammatical morphemes. This has to do with the fact that grammatical morphemes have two major properties that pose a challenge to the child: first, these have a grammatical function, and second, in fast speech, they usually undergo phonological reduction, making them less prominent to observe. The Grammatical Agreement Deficit Hypothesis (Clahsen, 1989), on the other hand, suggests that establishing structural relations properly is challenging for children with DLD; a typical example in this respect is subject-verb agreement, especially in languages that have a morphologically rich inflectional system, e.g., Germanic and Romance languages. Another important category is tense.

Research on the morphosyntactic features of the language of children with DLD reveals that different languages exhibit different types of deficits. For example, studies on some of the European languages, including German and Italian (Leonard et al., 1987; Clahsen, 1989; Lindner & Johnston, 1992) have revealed that morphological deficits in these languages may be less severe than deficits in a language like English, or it could be the case that speakers of these languages might have problems with specific types of grammatical morphemes. The expectation, therefore, is that in Arabic which exhibits a root-and-pattern morphological system, different deficits are expected to appear. Research on DLD in Arabic focused on tense, agreement, the definite article, and prepositions (Abdallah, 2002; Abdallah & Crago, 2008; Abdallah et al., 2013; Taha, 2022). However, these particular aspects of the morphosyntax of Jordanian Arabic-speaking children with DLD have not been investigated. Therefore, this paper seeks to address the verbal paradigms in

terms of tense and agreement, and how both the definite article and prepositions are used. This paper seeks to address the following issues

(1) whether Jordanian Arabic-speaking children with DLD create verbal inflections that are similar to typically growing children

(2) whether verbal inflections (tense and agreement) are more difficult for Jordanian Arabic-speaking children with DLD, and

(3) how Jordanian Arabic-speaking children with DLD use the definite article and prepositions.

The rest of the paper is organized as follows; section (2) outlines the methodology; in sections (3) and (4), the results are presented and discussed; and the last section concludes the study.

II. Methodology

A. Participants

There were 50 Jordanian Arabic-speaking children participants. These children were divided into two groups: 25 children with DLD (experimental group), and 25 age-matched normally developing children (control group). All the participants in the first group who were diagnosed by certified speech pathologists were being treated in four private speech therapy clinics in Irbid, Jordan. The average age of the DLD children was 68.24 months, with a range of 4; 2 to 7; 7 years. The clinics conducted clinical evaluations and intervention programs for the children. The children passed oral-motor assessments and hearing screenings. The study used phonological short-term memory tasks, a comprehensive language test, and the Arabic Language Screening Test to diagnose language difficulties. The Nonword Repetition Task was designed to reflect the morphological and phonotactic norms of Arabic; the Arabic Language Test included Sentence Repetition, Expressive Language, and Sentence Comprehension subtests. The TD children were from Irbid, who were enrolled in daycare kindergartens and schools. The children, aged 4-7, had age-appropriate language abilities and no history of language delay or impairment. Their parents completed a questionnaire to confirm that all children spoke Arabic as their first language, were monolingual.

B. Materials and Scoring

The study aimed to evaluate the use of articles, subject-verb agreement, past tense, and propositions using elicitation tasks and spontaneous language samples. Data collection tools included the Picture Description Task, Spontaneous Speech Sample, and Storytelling Activity with a Series of Pictures. The Picture Description Task used twenty images to elicit various morphosyntactic structures, while the Spontaneous Speech Sample used open-ended questions to explore a child's morphosyntactic abilities in discussing past events. The Storytelling Activity with a Series of Pictures assessed the child's ability to use morphosyntactic structures cohesively and sequentially. The children were assessed individually in their kindergartens, schools, or speech and language therapy clinics; each session lasted around 1 hour; their responses were audio-recorded using a Voice Memos App (AAC) codec. The children were asked to describe 20 pictures containing familiar activities, and then asked questions. In the story retelling format, the children listened to the story with pictures being shown to them; they were then asked to retell the story that is represented in the same pictures. In the conversation, the preselected topics were introduced to the children; then a discussion of these topics followed. The responses of the children were first transcribed; then their performance was scored as correct or incorrect. The soring method of Abdallah and Crago's (2008) was used to evaluate the children’s performance in agreement. As regards the use of the definite article, scoring was based on the correct usage of the definite article and prepositions, with a score of 1 assigned for accuracy and 0 for omissions or errors.

C. Analysis

Python software Version 3.31 was used for statistical analysis, converting raw scores into percentages. The data were analyzed descriptively and inferentially. The descriptive analysis computed means, standard deviations, and frequency distributions for each morphosyntactic skill in both groups. The inferential analysis used an independent t-test to determine significant differences, if any, between groups, and to compare the mean scores for each morphosyntactic skill. The significance thresholds were established at $p < .05$. A basic effects analysis was conducted after significant interactions. To account for the type 1 error, the p value was divided by the total number of comparisons.

III. Results

A. Tense

Since the respondents barely used future forms, only the present and past tense forms were considered. The results revealed a significant difference in the use of correct tenses between the experimental and control groups ($t = -8.370$, $df = 48$, $p = 0.000$). TD children ($M = 0.98$, $SD = 0.045$) demonstrated a significantly higher mean number of correct tense uses compared to children with DLD ($M = 0.69$, $SD = 0.167$). When examining specific tenses, similar patterns were observed. The control group showed a higher mean number of correct past tense uses ($M = 0.98$, $SD = 0.069$) when compared to the experimental group ($M = 0.86$, $SD = 0.258$). Additionally, the experimental group demonstrated a

lower mean number of correct present tense uses (M = 0.60, SD = 0.236) when compared to the control group (M = 0.98, SD = 0.055).

TABLE 1
T-TEST ON THE CHILDREN'S RESPONSES FOR USING CORRECT TENSES

Domain	Group	No	Mean	SD	t	df	Sig
tense	DLD TD	25 25	0.69 0.98	0.167 0.045	-8.370	48	0.000
past	DLD TD	25 25	0.86 0.98	0.258 0.069	-2.249	48	0.029
present	DLD TD	25 25	0.60 0.98	0.236 0.055	-7.857	48	0.000

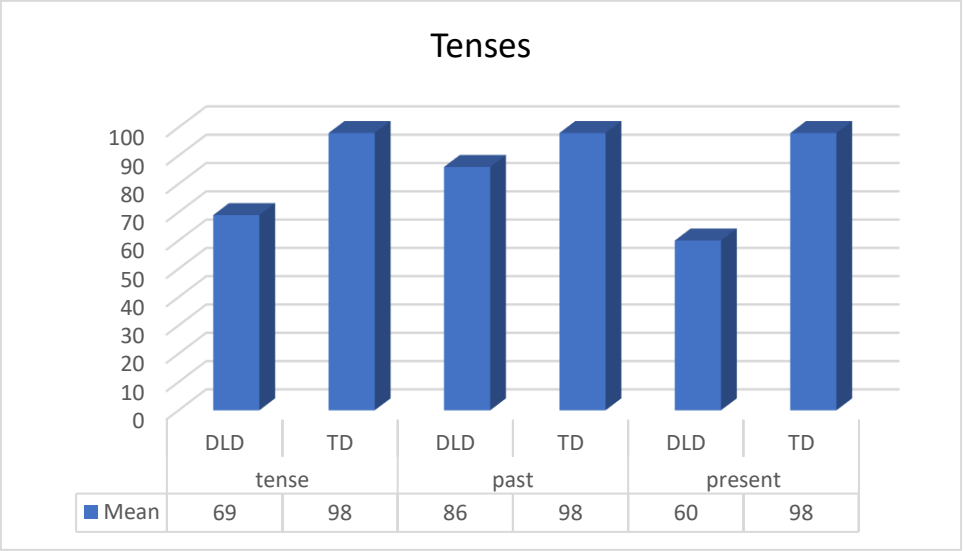

Figure 1. Percent of Correct Present and Past Tense Forms

As is apparent in Figure 1, the difference between the two tenses (86% and 60 %) was significant for the experimental group but insignificant for the control group (98% and 98%). Figure 2 shows that the scores for the past tense forms were higher than those for the present tense forms in the DLD group.

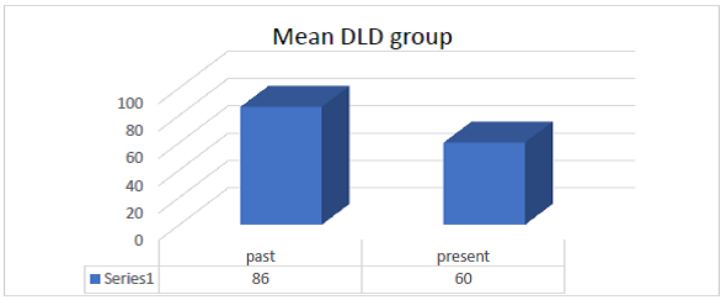

Figure 2. Percent of Correct Present and Past Tense Forms for DLD

B. Subject-Verb Agreement

When comparing the two groups for subject-verb agreement accuracy, it was evident that the scores in the person, number, and gender categories were different. Clearly, significant differences were observed as regards the correct subject-verb agreement forms between both groups (t = -8.646, df = 48, p = 0.000). There were significant differences between both groups I favor of the control group: (M = 0.98, SD = 0.048) for the control group vs. (M = 0.60, SD = 0.214) for the experimental group.

TABLE 2
T-TEST ON THE CHILDREN'S RESPONSES FOR USING CORRECT SUBJECT-VERB AGREEMENT

Domain	Group	No	Mean	SD	t	df	Sig
Subject-verb agreement	DLD TD	25 25	0.60 0.98	0.214 0.048	-8.646	48	0.000
person	DLD TD	25 25	0.87 1.00	0.128 0.000	-4.949	48	0.000
number	DLD TD	25 25	0.81 0.98	0.188 0.037	-4.580	48	0.000
gender	DLD TD	25 25	0.70 1.00	0.221 0.020	-6.750	48	0.000

C. Person Agreement

As regards person, there were differences between both groups (t=-4.949, df=48, p = 0.000); the respondents in the experimental group were outperformed by those in the control group (M= 0.87, SD= 0.128); on the other hand, the mean number of the correct uses of person forms for the control group was higher (M= 1.00, SD= 0.00).

D. Number Agreement

As regards number, there were differences between both groups (t=-4.580, df=48, p = 0.000); again the respondents in the experimental group were outperformed by those in the control group (M= 0.81, SD= 0.188); however, the mean value of using the correct number forms for the control group was higher (M= 0.98, SD= 0.037).

E. Gender Agreement

As regards gender, there were differences between both groups (t=-6.750, df=48, p = 0.000); the number of respondents in the experimental group who used the correct gender forms was lower than those in the control group (M= 0.70, SD= 0.221); the mean value of using the correct gender forms for control group was higher (M= 1.00, SD= 0.020).

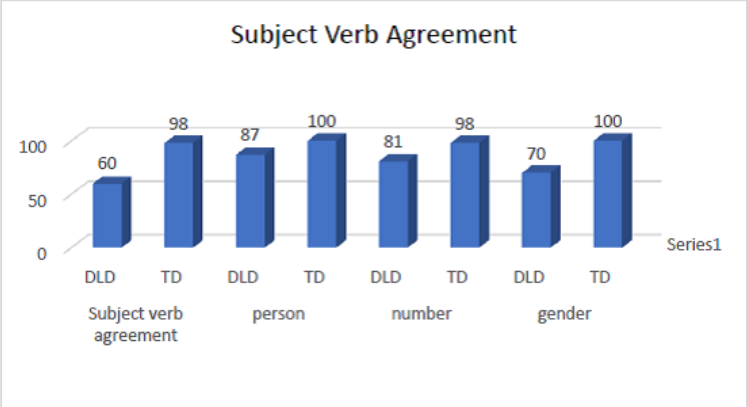

Figure 3. Correct Subject-Verb Agreement Marking for Both Groups

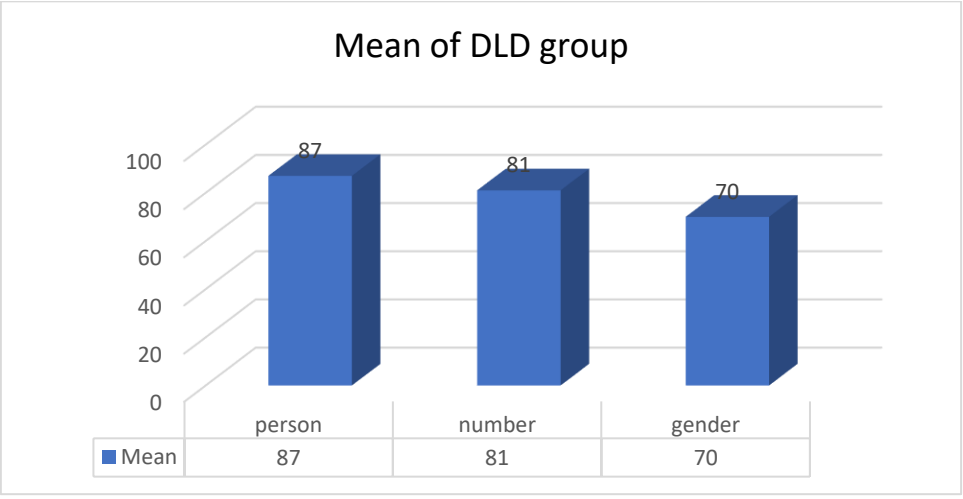

Figure 4. Correct Subject-Verb Agreement for DLD

As is apparent in Figure 4, the scores in the gender category were lower than those in the number and person categories. Number agreement was lower than person agreement for the experimental group.

F. Prepositions

Table 3 presents the mean and median percentage of correct use, sample size, and standard deviations for prepositions. Significant differences in the use of correct prepositions transpired between the experimental group and the control group (t = -6.710, df = 48, p = 0.000). The control group (M = 0.99, SD = 0.025) demonstrated a significantly higher mean number of correct preposition use compared to the experimental (M = 0.66, SD = 0.246), as shown in Figure 5.

TABLE 3
T-TEST ON THE CHILDREN'S RESPONSES FOR USING CORRECT PREPOSITIONS

Domain	Group	No	Mean	SD	T	df	Sig
prepositions	DLD TD	25 25	0.66 0.99	0.246 0.025	-6.710	48	0.000

Prepositional errors might be either omissions or substitutions. When prepositional forms were compared, a common pattern transpired. The use of locative prepositions (e.g., "foog" (up) and "fi" (in) was more accurate than that of certain other kinds (e.g., "obi" (with) and "li" (to)) for both groups. The majority of the mistakes made by the experimental involved either "bi-" or "li"; these two prepositions were either substituted or omitted. Consequently, it seems that certain prepositions are more complex than others and that different prepositions may not be affected in the same way.

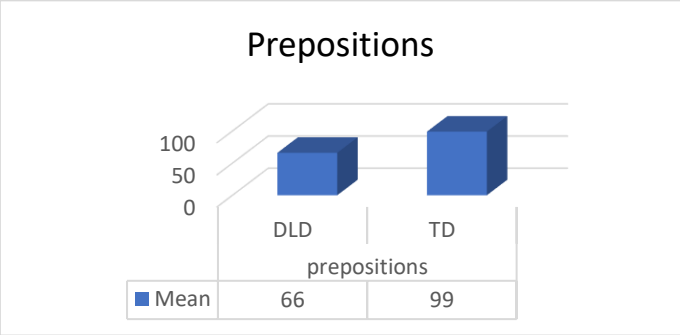

Figure 5. Percent Correct Prepositions Use

G. The Definite Article

Note that some definite forms in Arabic are prefixed with the definite article '?al'; indefinite forms, however, are not marked. Standard deviations, sample size, and averages for the percentage of accurate production for the specific article. There was a significant difference in the use of correct determiners between the groups (t = -9.919, df = 48, p = 0.000). The control group (M = 0.99, SD = 0.022) demonstrated a significantly higher mean number of correct determiner use compared to the experimental group (M = 0.32, SD = 0.338), as shown in Figure 6.

TABLE 4
T-TEST ON THE CHILDREN'S RESPONSES FOR USING THE CORRECT ARTICLE

Domain	Group	No	Mean	SD	t	df	Sig
Article	DLD TD	25 25	0.32 0.99	0.338 0.022	-9.919	48	0.000

The scores of the experimental group show that they were outperformed by the control group. All errors involved article omissions.

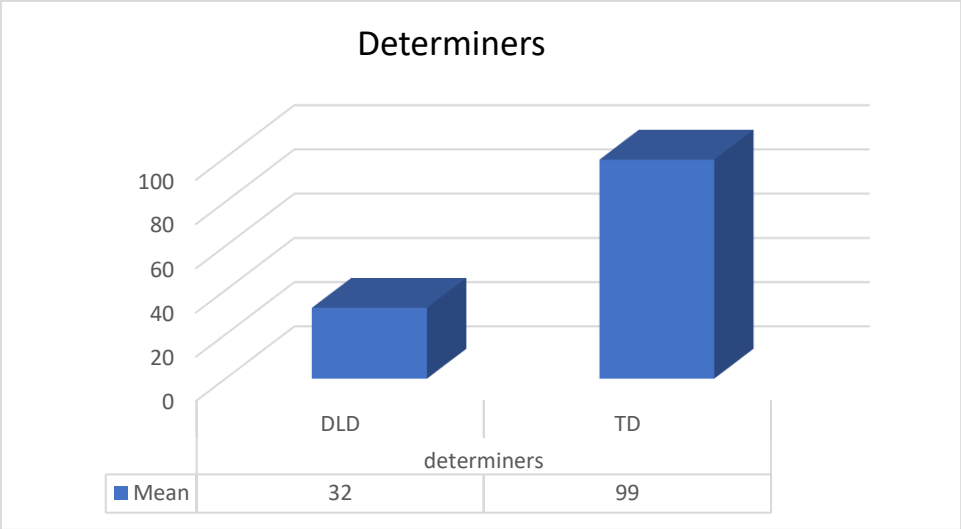

Figure 6. Percent Correct Usage of the Article

Figure 6 shows that scores for the experimental group were considerably lower than those of the control group. All errors involved article omissions. Since Arabic only marks the definite article, substitution error patterns were precluded. The results show that Arabic-speaking children with DLD demonstrate deficits in various morphosyntactic categories compared to their typically developing peers.

IV. Discussion

As illustrated earlier, the main morphosyntax aspects investigated were verbal conjugations (tense and agreement), as well as the correct uses of the definite article and prepositions. The performance of both groups was compared for the purpose of measuring the performance of the first group. The data were classified and examined to determine the proportion of accurate use.

In general, the performance of the participants demonstrated the following essential traits. First, the use of tense inflection was rather inconsistent; the correct and incorrect forms of tense were used exchangeable. In essence, the experimental group's accuracy for both present and past tense forms was unmistakably lower than that of the control group. One intriguing pattern emerged: declarative forms were replaced by imperative forms.

As regards subject-verb agreement, the experimental group was outperformed by the control group. Additional analysis of the different types of agreement revealed that there was noticeable variability in the responses. For example, third person singular forms exhibited a higher percentage of accuracy when compared with the first person counterparts.

Lastly, the analysis of the use of the definite article and prepositions revealed that the accuracy in the use of the correct forms of prepositions was higher than that of the definite article. As regards the use of prepositions, the groups differed greatly from one another. Interestingly, the use of prepositions types other than locatives seemed to pose a challenge as reflected by the results which showed that locatives had a higher accuracy rate; errors in this particular area were usually substitutions or omissions.

A. Tense and Subject–Verb Agreement

The proportion of proper use of tense and agreement forms varied significantly across both groups; as expected, the scores of the experimental group were much lower than those of the control group. This shows that production of verbal inflection is challenging for kids with DLD. These results are consistent the well-established assumption that verbal conjugations are challenging for children with DLD (Abdallah & Crago, 2008; Fahim, 2017; Taha et al., 2021); this also seems to be the case other languages like English, Hebrew, Italian, and Swedish (Leonard & Dromi, 1994; Rice & Wexler, 1996; Bortolini et al., 1997; Hansson & Leonard, 2003; Rothweiler et al., 2012).

The overall percentage of proper tense marking (69%) for the experimental was quite lower than that of the control group. A significant pattern emerged when the groups' accuracy ratings for the two tense versions were compared. The accuracy of the past tense forms was good in both groups; their scores were 98% (control) and 86% (experimental). With a mean accuracy of only 60%, the experimental group, on the other hand, struggled greatly with the present tense forms. This echoes findings reported in other studies (e.g., Abdallah & Crago, 2008; Taha, 2021). At the opposite end, in Germanic (e.g., Danish, English, German, and Swedish), the past tense form is more challenging (Krok & Leonard, 2015). Considering the fact that Arabic is a Semitic language, such a difference is quite expected. What is quite surprising, however, is the fact that Hebrew, a Semitic language, patterns with the Germanic languages in the use of the past tense form. These variations may be explained by variations in the morphological makeup of words in different languages. For example, Dromi et al. (1999) attribute this similarity between Hebrew and Germanic to the greater number of agreement elements of the past tense form in Hebrew. In Jordanian Arabic, while past tense morphology is

prefixal, present morphology is both prefixal and suffixal form. Another plausible explanation is offered by Marshall and van der Lely (2007) who claim that present tense forms involve consonant clusters, a feature that children with DLD appear to struggle with.

As regards agreement, the experimental group generated 60% of the verbs with the right agreement forms; the control group's accuracy rate was 98%. Dormi et al. (1999) argue that complex agreement morphology could be the reason why these forms present a challenge to children with DLD. Interestingly enough, the accuracy of masculine forms was similar in both groups; however, the experimental group was less accurate in creating the feminine forms. The same holds true for Hijazi- Arabic-speaking children with DLD (Abdallah & Crago, 2008). This seems to be related to the assumption that the masculine forms are often acquired in Arabic before the feminine verb forms, making them more readily available both in production and perception (Al-Akeel, 1998; Aljenaie, 2001). As regards number marking, the experimental group produced both singular and plural forms in a manner comparable to that of the control group. However, the morphology of plural forms proved problematic for the experimental group. Singular forms are easier than plural forms. It follows that these forms are expected to be easier to produce and understand (Omar, 1973; Abdu & Abdu, 1986; Al-Akeel, 1998; Aljenaie, 2001; Moawad, 2006; Basaffar & Safi, 2012). Similar findings were also reported for children with DLD in Egyptian Arabic, Kuwaiti Arabic, Palestinian Arabic, and Hijazi Arabic (Aljenaie, 2001; Abdallah & Crago, 2008; Fahim, 2017; Taha et al., 2021).

Moreover, both groups exhibited a high rate of accuracy in their use of third-person agreement. This degree of correctness may be attributed to the observation that TD children learning Arabic start using third-person verb forms early on (Abdu & Abdu, 1986). Abdallah and Crago (2008), report a lower accuracy rate (66%) for DLD children speaking Hijazi Arabic. One reasonable explanation for this variability is the age factor; in Abdallah and Crago, the mean age of the children was 57 months while, in this study, the mean age was 68.24.

The results obtained in this study seem to provide empirical support in favor of GAD (Clahsen, 1989). GAD rests on the assumption that the subject has agreement features that are uninterpretable, i.e., they are not significant from a semantic perspective. In this respect, children with DLD ignore them. GAD, however, fails to account for the children's superior proficiency with some forms as compared to others. The Extended Optional Infinitive Theory, however, seems to offer a reasonable explanation of the difficulty. The idea behind this hypothesis is that DLD is an expansion of a common acquisition pattern: non-transparent affixes are assumed by children to be optional; therefore, when producing forms that require these affixes, these affixes are usually left out (the optional infinitive state). This assumption seems to be supported by the fact that it was difficult for the DLD group to understand the past tense singular feminine form. The feminine suffix has lower acoustic salience; therefore, it is expected to be overlooked by children with DLD since it occurs in an unstressed syllable.

B. Production Accuracy of Prepositions and the Definite Article

The study of prepositions in DLD across languages has received little attention. For example, Restrepo (1997) has indicated that Spanish-speaking DLD children were more likely to omit prepositions. This also seems to be case for Arabic-speaking children with DLD. In this study, the experimental group produced less prepositions than the control group. Given that those children struggle with certain types of morphemes, these results are not unexpected. In fast speech, prepositions in Jordanian Arabic are prefixed to the following noun, e.g., bil-daar (in the house), ʕal-baab (on the door), etc. Since the definite article is also a prefix, a similar scenario, is expected to emerge; this prediction is indeed borne out. In this study, the experimental group's use of the definite article was less than that of the control group. Two broad patterns emerged from the data. The first concerns accuracy rates during item manufacture. The second concerns the types of errors made when employing a necessary item. Even though the DLD children performed much lower than their average age-matched group, the majority of the children in both groups generated inaccurate patterns in spontaneous speech. The most recurrent error type was the omission error. According to Hoekstra and Hyams (1998), determiners in Germanic languages are comparable to tense-bearing morphemes; hence determiners are predicted to behave like tense. The deficient pattern of the definite article appears to be similar at first look to English (Rice & Wexler, 1996). Consequently, it appears that tense and so-called tense-related morphemes (determiners) are difficult for children with DLD to master. However, the claim about the lack of determiners and their possible connection to tense was based on Germanic languages (Hoekstra & Hyams, 1998). However, the connection is not clear-cut considering the patterns of variability in other languages, e.g., the Romance languages, Spanish and Italian vs. French (Bortolini et al., 1997; Paradis & Crago, 2001; Bedore & Leonard, 2002). Thus, a determiner-tense relationship may not necessarily explain the greater frequency of definite article deletion seen in Jordanian Arabic. For an Arabic nominal phrase to be considered "definite", several conditions need to be met (Chafe, 1976), including pragmatic and syntactic issues. For example, Brustad (2000) notes that syntactic factors may decide when to employ the definite article in Arabic since the link between individuation and definiteness is not always clear.

All in All, the Surface Account Hypothesis maintains that some morphemes are relatively short in duration. Processing these forms when they serve a morphological purpose can be difficult for kids with DLD since it requires identifying the morphemes, figuring out their morphological function, and placing them in a certain morphological configuration (Leonard et al., 1997). Furthermore, children with DLD already have a reduced processing capacity; the result then is that the processing of grammatical morphemes will not be at the required level (Leonard et al., 1997).

V. Conclusion

This study investigated the morphosyntactic development of Arabic-speaking children with DLD compared to TD children. It found that DLD children struggled with linguistic categories such as tense, subject-verb agreement, prepositions, and determiners. TD children consistently outperformed DLD children in these areas, indicating their difficulty both in production and perception. The study also revealed that DLD children were affected by the surface forms of the language, especially in the domain of inflectional morphology.

References

[1] Abdallah, F. (2002). *Specific language impairment in Arabic- speaking children: Deficits in morphosyntax.* [Unpublished doctoral dissertation]. McGill University.

[2] Abdalla, F., & Crago, M. (2008). Verb morphology deficits in Arabic-speaking children with specific language impairment. *Applied Psycholinguistics*, *29*(2), 315-340.

[3] Abdalla, F., Aljenaie, K., & Mahfoudhi, A. (2013). Plural noun inflection in Kuwaiti Arabic-speaking children with and without specific language impairment. *Journal of child language*, *40*(1), 139-168.

[4] Al-Akeel, A. (1998). *The acquisition of Arabic language comprehension by Saudi children*. [Unpublished doctoral dissertation]. Newcastle University.

[5] Aljenaie, K. (2000). The emergence of tense and agreement in Kuwaiti children speaking Arabic. *Reading Working Paper in Linguistics*, *4*, 1-24.

[6] Bedore, L., & Leonard, L. (2002). Grammatical Morphology Deficits in Spanish-Speaking Children With SLI. *Journal of Speech, Language, and Hearing Research*, *45*(5), 1015-1015.

[7] Bliss, L. (1989). Selected syntactic usage of language-impaired children. *Journal of Communication Disorders*, *22*(4), 277-289.

[8] Bortolini, U., Caselli, M., & Leonard, L. (1997). Grammatical deficits in Italian-speaking children with specific language impairment. *Journal of Speech, Language, and Hearing Research*, *40*(4), 809-820.

[9] Brustad, K. (2000). *The Syntax of Spoken Arabic: A Comparative Study of Moroccan, Egyptian, Syrian, and Kuwaiti Dialects*. Washington: Georgetown University Press.

[10] Chafe, W. (1976). Givenness, contrastiveness, definiteness, subjects, topics, and point of view. In C. Charles (Ed.), *Subject and Topic* (pp. 25-55). Academic Press.

[11] Clahsen, H. (1989). The grammatical characterization of developmental dysphasia. *Linguistics*, *27*, 897–920.

[12] Dromi, E., Leonard, L., Adam, G., & Zadunaisky-Ehrlich, S. (1999). "Verb agreement morphology in Hebrew-speaking children with specific language impairment." *Journal of Speech, Language, and Hearing Research*, *42*(6), 1414-1431.

[13] Fahim, D. (2017). Verb morphology in Egyptian Arabic developmental language impairment. *Arab Journal of Applied Linguistics*, *2*(1), 49-73.

[14] Gopnik, M., & Crago, M. (1991). Familial aggregation of a developmental language disorder. *Cognition*, *39*(1), 1-50.

[15] Hansson, K., & Leonard, L. (2003). The use and productivity of verb morphology in specific language impairment: An examination of Swedish. *Linguistics*, *41*(2), 351-379.

[16] Hoekstra, T., & Hyams, N. (1998). Agreement and the finiteness of V2: Evidence from child language. In *Proceedings of BUCLD*, *22*(2), 360-373.

[17] Krok, W., & Leonard, L. (2015). Past tense production in children with and without specific language impairment across Germanic languages: A meta-analysis. *Journal of Speech, Language, and Hearing Research*, *58*(4), 1326-1340.

[18] Leonard, L. (2017). *Children with specific language impairment*. MIT press.

[19] Leonard, L., Eyer, J., Bedore, L., & Grela, B. (1997). Three accounts of the grammatical morpheme difficulties of English-speaking children with specific language impairment. *Journal of Speech, Language, and Hearing Research*, *40*(4), 741-753.

[20] Leonard, L., & Dromi, E. (1994). The use of Hebrew verb morphology by children with specific language impairment and children developing language normally. *First Language*, *14*(42-43), 283-304.

[21] Leonard, L., Caselli, C., Bortolini, U., McGregor, K., & Sabbadini, L. (1992). Morphological deficits in children with specific language impairment: The status of features in the underlying grammar. *Language Acquisition*, *2*(2), 151-179.

[22] Leonard, L., Sabbadini, L., Leonard, J., & Volterra, V. (1987). Specific language impairment in children: A cross-linguistic study. *Brain and Language*, *32*(2), 233-252.

[23] Marshall, C., & Van Der, H. (2007). The impact of phonological complexity on past tense inflection in children with Grammatical-SLI. *Advances in Speech Language Pathology*, *9*(3), 191-203.

[24] Paradis, J., & Cargo, M. (2001). The morphosyntax of specific language impairment in French: An extended optional default account. *Language Acquisition*, *9*(4), 269-300.

[25] Restrepo, M. A. (1997). *Grammatical errors in Spanish-speaking children with language impairment who are learning English as a second language.* Paper presented at the International Symposium on Bilingualism, Newcastle, England.

[26] Rice, M., Wexler, K., & Cleave, P. (1995). Specific language impairment as a period of extended optional infinitive. *Journal of Speech and Hearing Research*, *38*, 850–863.

[27] Rice, M., & Kenneth, W. (1996). Toward tense as a clinical marker of specific language impairment in English-speaking children. *Journal of speech, language, and hearing Research*, *39*(6), 1239-1257.

[28] Rothweiler, M., Chilla, S., & Clahsen, H. (2012). Subject–verb agreement in specific language impairment: A study of monolingual and bilingual German-speaking children. *Bilingualism: Language and Cognition*, *15*(1), 39-57.

[29] Taha, J. (2022). *Clinical markers of developmental language disorder in Arabic.* [Unpublished doctoral dissertation]. University of Reading.

[30] Taha, J., Stojanovik, V., & Pagnamenta, E. (2021). Expressive verb morphology deficits in Arabic-speaking children with developmental language disorder. *Journal of Speech, Language, and Hearing Research*, *64*(2), 561-578.

[31] Tsimpli, I. M., & Stavrakaki, S. (1999). The effects of a morphosyntactic deficit in the determiner system: The case of a Greek SLI child. *Lingua*, *108*(1), 31-85.

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