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Early Language Behavior in a Diglossic Context: Code-Switching Between Standard Arabic and Najdi Arabic in Preschool Children

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ABSTRACT

This study investigated diglossic code-switching among 30 Najdi Arabic-speaking preschool children aged 4 to 6 years, focusing on gender differences in the direction and frequency of switching between Standard Arabic (SA) and Najdi Arabic (NA). Data were collected through an individual storytelling task in which each child listened to and retold three short stories in SA. The analysis focused on intra-sentential code-switching within verbal clauses, particularly switching from SA or NA verbs to SA or NA nouns to examine structural constraints. The results showed that both male and female children were capable of understanding and using SA despite limited formal exposure. Quantitative analysis revealed systematic switching, with a higher frequency of switches occurring from NA verbs to SA nouns, consistent with Eid's (1988) directionality constraints and Petersen's (1988) dominant language hypothesis. While switching from SA verbs to NA nouns was also observed, it occurred less frequently. Female participants showed a slightly higher overall use of SA, whereas male participants exhibited a stronger tendency to switch from SA verbs to NA nouns; however, the difference between the two groups is negligible. The study concludes by recommending further research into diglossic code-switching across different Arabic dialects, linguistic structures, and broader populations to deepen understanding of early bilingual development in diglossic contexts.

Keywords: Diglossia; Code-Switching; Standard Arabic; Najdi Arabic; Male Preschool Children; Female Preschool Children; Linguistic Constraints

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1. Introduction

In Arabic-speaking communities, Standard Arabic (SA) and colloquial Arabic (CA) coexist. SA is the highest Arabic register, while CA encompasses the regional dialects commonly used in daily conversation and other forms of informal communication. As it is neither a native variety nor naturally acquired by speakers^[1, 2], SA functions primarily as a written language characterized by a highly codified grammar and orthography, serving as the official language within different parts of the Arabic-speaking world^[3, 4]. In contrast, CA is the primary spoken variety^[2, 5, 6]. This situation means that the Arabic language is described as diglossic. Diglossic languages, as originally defined by Ferguson in 1959^[7], have two main varieties: High and Low forms. Arabic is considered a diglossic language because it has both SA (the formal language learned at school) and a colloquial variety (the naturally acquired first language used in everyday life and informal situations).

Adults often switch between these two levels of language; several studies have been conducted to investigate adult diglossic code-switching between SA and CA (e.g., Bassiouney, Mejdell, and Alaiyed^[2, 8, 9]). Diglossic code-switching is widely used by Arabic speakers of different ages^[10], but few studies have addressed diglossic code-switching among children, especially those of preschool age. Although children learn SA at school, preschool children in the Arab world also gain exposure to it by watching animated cartoons and children's programmes. At the preschool stage, children engage in activities suitable for their age and start learning the Arabic alphabet and how to write it, but they do not study the syntax of the language or how to read and write.

The current research examines diglossic code-switching among preschool children, focusing on switching between SA and Najdi Arabic (NA). This study examines whether preschool children can code-switch between SA and the colloquial variety under investigation (NA), without violating established linguistic constraints. The study will determine whether the findings align with those from previous studies. Since gender affects the use of language, comparing the data of male and female preschool children will reveal any differences in their diglossic code-switching.

This study will address the following research questions:

1. Are preschool children able to use SA?
2. Do preschool children switch between SA and NA?
3. What is the direction of code-switching?
4. How often do preschool children switch between SA and NA when using nouns and verbs?
5. Do male and female children differ significantly in diglossic code-switching between SA and NA?
6. Does the diglossic code-switching found follow linguistic constraints?

The findings will contribute to the current literature on children's language and diglossic code-switching by children.

2. Theoretical Framework

2.1. Diglossic Code-Switching

Gumperz defines code-switching as "the juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or sub-systems"^[11]. Similarly, Gardner-Chloros describes code-switching as "the use of several languages or dialects in the same conversation or sentence by bilingual people. It affects practically everyone who is in contact with more than one language or dialect, to a greater or lesser extent"^[12]. Under this definition, code-switching can occur between languages and dialects.

Diglossia is where speakers use different codes or registers based on the context. A unified framework can be used to examine both diglossia and code-switching; as Bassiouney notes, code-switching encompasses diglossia^[8]. Therefore, diglossic code-switching refers to alternating between language varieties (High and Low varieties in the Arabic context) in a situation of diglossia. Sayahi defines diglossic switching as "the act of juxtaposing the H and the L varieties of the same historical language during a communicative event"^[13].

According to Shetewi, Corrigan, and Khattab, several terms have been used to describe the linguistic practice of diglossic code-switching^[14]. They note that various studies have explored this phenomenon (e.g., Bassiouney, R., Alaiyed, M., and Albirini, A.^[8, 9, 15]). Much of the research on diglossic code-switching has concentrated on what Albirini describes as "monitored speech"^[3], which tends to

prompt the use of SA in situations such as public addresses, academic lectures, panel discussions, religious sermons, and political interviews (e.g., Bassiouney, R., Alaiyed, M., and Soliman, A.^[8, 9, 16]). In these scenarios, according to Ferguson's (1959) model^[7], the shifts between SA and CA are primarily functional, with CA often employed to elucidate certain points or indicate a change in tone. Numerous studies on diglossic code-switching have confirmed this distinction between SA and CA (e.g., Mejdell, G., Bassiouney, R., Chakrani, B., and Holes, C.^[2, 8, 17, 18]), emphasizing their functional roles as High and Low varieties of Arabic^[3]. Furthermore, according to Albirini^[3], SA is never used solely in speech because speakers vary significantly in their proficiency in SA^[2]. Albirini notes that diglossic codeswitching is termed 'SA-CA (colloquial Arabic) codeswitching'^[3], based on the premise that educated Arabic speakers can converse using SA. Shetewi, Corrigan, and Khattab contend that SA is not simply on a continuum with spoken vernacular varieties; instead, it is a crucial stylistic tool for Arabic speakers^[14].

In the current study, the term diglossic code-switching is employed to refer to switching between SA and the CA variety under investigation. This is because the term "code" is preferred over "language" for specific reasons. As Abu-Melhim notes, the term code is more neutral than language because there is no clear boundary distinguishing a dialect from a language. Furthermore, some speech communities, such as those in Arab countries, experience diglossia where multiple varieties coexist with distinct functions. In addition, Walters argues that Arabic speakers' alternation between High and Low varieties corresponds to Myers-Scotton's definition of code-switching^[20]. Therefore, my study concentrates on diglossic code-switching, which varies among individuals. From my point of view, the term diglossic code-switching could best describe this linguistic practice. However, it is worth mentioning that code-switching becomes more complex when dealing with standard languages and dialects, such as SA and *'āmmīyah*, the colloquial varieties: NA in this study. Tsiplakou points out that the historical relationship between these varieties^[21], along with their phonological, morphological, syntactic, and lexical similarities and overlaps, complicates the establishment of a linguistic metric to identify code-switching.

There is a key difference between inter-sentential and intra-sentential code-switching (code-mixing or intra-

sentential code-mixing are also sometimes used to refer to intra-sentential code-switching)^[22, 23]. Inter-sentential code-switching occurs at clause boundaries, while intra-sentential code-switching takes place within a single clause^[22]. Certain researchers favor the term alternational code-switching to refer to alternations between segments of speech from different codes, varieties, or languages, whereas Muysken uses insertional code-switching or code-mixing to refer to individual elements from one code appearing within segments of another code^[22]. Recently, some sociolinguists proposed using the term code-switching specifically for conversational variations in code that have social meaning^[24, 25].

Gumperz notes that if a speaker uses code-switching, this does not mean that the speaker lacks proficiency in one of their languages but rather that code-switching is an additional tool for conveying a variety of social and rhetorical meanings^[11]. He explains that code-switching has functions that are pragmatic and expressive. In his analysis of contextual cues^[11], he notes that nonlinguistic elements of the speech context—such as speakers' social relationships and roles, the conversation type, the nature of the interactional exchange, audience design, occasion, and topic—can influence language choice. Furthermore, Davies et al. emphasize that code-switching should involve languages that are regularly used in spoken conversations within the community^[26]. Sharma argues that analyzing stylistic variation using "performative" approaches has enhanced our understanding of style, but that such approaches may inadvertently assume that individuals have equal mastery over the variants in their repertoire^[27]. However, knowing different varieties of a language does not guarantee their effective use. For some speakers, this knowledge is active, while for others it remains passive and factors such as age, gender, education level, and other external influences can affect this competence^[28]. Speakers might code-switch between different varieties even without fully mastering them^[14].

Within a speech community, SA and CA can coexist, serving different purposes with various levels of formality, importance, and complexity^[3]. Although Ferguson's model primarily classifies SA and CA contextually, it also considers functions. However, this study will focus on the structure and constraints of *intra-sentential* diglossic code-switching practiced by preschool children.

2.2. Linguistic Constraints

Specific constraints condition the code-switching of sentence components between two varieties. Palva highlights the mismatch between the syntactical systems of SA and the Palestinian dialect^[29], focusing on the modal system used in the imperfect tense:

Since this difference is substantially structural, it is natural that the departure deviation from the dialectal system is extremely difficult; it implies a transition into the classical modal system which cannot be attained through easy lexical borrowings or slight phonemic modifications. Notably, the non-dialectal imperfect forms are very rare in the present texts.

Eid added to the understanding of the unequal status of these varieties through her research on the principles of code-switching between SA and Egyptian Arabic (EA)^[30, 31]. In her studies, Eid analyzed code-switching occurrences in tense and verb constructions, relative subordinate clauses, clause structures, and negative constructions. By identifying positions immediately before and after SA and EA focal points within each of these structures, she aimed to determine particular SA/EA combinations of elements. Her conclusion was that before the focal point, the word was flexible rather than restricted to the same SA or EA variant as that of the focal point. Conversely, “if the focal point [was] from SA, the element immediately following that focal point must also be from SA”^[31].

Eid proposed eight potential combinations for each linguistic variable examined^[30, 31]. Her directionality constraint explained asymmetric conditioning, which “may be related to the manner of acquisition of each variety: which variety was natively, and which was non-natively learned”^[31].

Mejdell explains the constraints observed in diglossic SA and CA code-switching in terms of Petersen’s *dominant language hypothesis*^[2, 32]. Petersen describes this hypothesis as follows, which she developed after conducting a study on a Danish–English bilingual child:

The dominant language hypothesis states that in word-internal code-switching, grammatical morphemes of the DOMINANT language may co-occur with lexical morphemes of ei-

ther the dominant or the nondominant language. However, grammatical morphemes of the NONDOMINANT language may co-occur only with lexical morphemes of the nondominant language^[32].

As Mejdell suggests^[2], this hypothesis best accounts for the phenomenon of “Arabic code interaction,” where speakers’ Arabic dialect is regarded as the dominant variety because it is typically the first language or variety acquired naturally by them. Mejdell associates this with the dominant language hypothesis^[2], proposing that if the focal point is in SA, it is not permissible to immediately code-switch to a dialectal variant; however, if the focal point is in the spoken variety, then it is possible to switch to both SA and dialectal variants. Thus, since it is natively acquired, the dialect appears to be the dominant language. In general, switching after dialectal linguistic elements to either SA or the dialect is possible, whereas dialectal elements do not follow SA linguistic variables.

2.3. Previous Research on Diglossic Code-Switching by Children

Research on how children code-switch between SA and CA is somewhat limited. Sabir and Safi focused on diglossic code-switching by a child aged 5 years and 6 months between SA and the Hejazi dialect^[10], analyzing spoken data based on equivalence constraints^[33]. The study found that the child switched freely between SA and the Hejazi dialect. The code-switching followed rules and fully adhered to equivalence constraints, suggesting early competence in the syntactic structures of both varieties. Additionally, the analysis revealed that verbs were the most commonly switched elements, despite being the most syntactically and semantically complex units within sentences.

Manel investigated code-switching between SA and Algerian Arabic, among 6-year-old preschool children from Dib Tahar primary school in Elkroub, Constantine, Algeria^[34]. Data were collected using participant observation, an interview with the teacher sample, and recordings. Similar to Sabir and Safi^[10], the findings confirmed that the code-switching by the participants was rule governed. The children switched between the two varieties addressed in the study during their classes. In order to express themselves,

they sometimes deviated from the standard pronunciations of Algerian words.

Shetewi, Corrigan, and Khattab explored the phenomenon of diglossic style-shifting among children and teenagers aged 3 to 17 from a community of Bedouin-speaking Palestinian refugees in Syria^[14]. They aimed to gain an understanding of how context influenced the expression of the (θ) and (ð) variables, as well as their interaction with the local realization and the standard realization of (q) as [q], which remained consistent regardless of dialectal differences within the community. The data were gathered by recording sociolinguistic interviews as well as a picture-naming task. The findings suggested that participants' style-shifting was conditioned by the particular linguistic variables concerned, as well as the context and the participants' age. For all variables, the standard realization was used in the picture-naming task. Similarly, during the interviews, participants shifted to [q] in SA lexical borrowings. Children between the ages of 6 and 14 showed a stronger tendency to shift styles when naming pictures, which likely reflects how school significantly influenced their lives. In contrast, participants between the ages of 15 and 17 used more lexical borrowing with [q] in their speech, probably because they had more developed linguistic skills and had received greater exposure to SA compared to the younger children. These observations suggest that SA plays a key role in shaping participants' linguistic behavior, as well as demonstrating their understanding of how to use it effectively in conversation.

Similarly, the current study will investigate preschool children's diglossic code-switching between SA and NA, focusing on code-switching between verbs and nouns in verbal sentences.

2.4. Language and Gender

In Trudgill's overview of sociolinguistic studies on gender-specific speech patterns in highly industrialized Western nations^[35], he highlights a consistent finding while accounting for variables such as social class, age, and education: women tend to use linguistic forms that correspond more closely with the standard language or are viewed as more prestigious than those used by men. Economic and social influences may shape this pattern. Bassiouney^[36] and Trudgill^[37] propose that in Western societies, the association between women and more prestigious linguistic variants is

linked to their perceived social insecurity; in such a situation, language functions as a strategy to attain social status. However, this perspective has been challenged by numerous studies (cf. Holmes, J.^[38]). In Sweden, a country celebrated for its gender equality, Romaine discovered that women use prestigious language variants more frequently than men^[39]. Bassiouney also suggests that women might adopt certain language patterns to gain respect and power^[36], which involves affirming their position within a social group by using its prestigious standard language variety. For instance, membership of a group that speaks a prestigious standard variety entails using that dialect if an individual wants. However, Salami found that, owing to their already significant societal participation, there is no requirement for Nigerian women to speak in a more prestigious manner compared to men^[40]. Labov highlights a difference between Arab and Western nations^[41]. Although women in the West tend to be more linguistically conservative, the opposite trend is apparent in Arab countries. Drawing on Abdel-Jawad's research^[42], Labov concludes that men use the standard /q/ in Amman at a higher rate than women. However, Labov may have overlooked how prestige and standard varieties are distinguished in the Arab world. As Bassiouney clarifies, many research studies focusing on Arab countries have identified a prestigious vernacular, which is influenced within each community by political, social, and geographical aspects^[8]. Moreover, the prestigious linguistic variety can encompass a major city's urban variety and SA.

Early investigations into Arabic sociolinguistic patterns posited that male speakers showed a preference for SA variants, viewing them as indicators of power, authority, and engagement in public life (e.g., Bakir, M., and Sallam, A.^[43, 44]). These assumptions were later contested for overlooking the dual prestige levels in Arabic and for not differentiating between local and standard variants in overlapping cases. Nonetheless, the notion that men are more inclined than women towards using SA variants persists^[45, 46]. Miller examined rural migrants in Cairo and observed that male participants used lexical borrowing and standard forms more frequently than women^[45]. Conversely, Bassiouney reported differing findings in her investigation of SA use by Egyptian talk show hosts who were highly educated men and women^[36]. The use of SA was associated with particular functions, such as expressing assertiveness and finality, as

well as indexing an identity associated with power and authority. Bassiouney's research indicates that women are able to equally access SA, sometimes even using it to a greater extent than men.

In summary, previous studies have revealed that adult men and women display differing code-switching behavior. The current study focuses on differences in diglossic code-switching among male and female preschool children; it will contribute to the field of sociolinguistics by revealing the gender differences in children's code-switching behavior.

3. Materials and Methods

3.1. Participants

The research sample consisted of 30 Saudi children (15 females and 15 males) aged 4 and 6 years; all of the participants are native speakers of NA. They lived in Qassim (Najd region) and attended one of two kindergarten schools in Arrass City, Qassim. None of the children had started primary education. In kindergarten, children typically begin learning numbers and the alphabet, as well as memorizing short surahs from the Holy Quran. However, they do not engage in SA courses, as these are introduced when they start primary school at age 7.

Given the challenges inherent in working with preschool populations—such as limited attention spans and variability in language exposure—a sample of 30 participants allows for meaningful qualitative insights while maintaining feasibility in data collection. This sample size aligns with similar previous research on Arabic language acquisition and sociolinguistics, which often involves comparable numbers of participants to balance depth of analysis with logistical constraints (cf. Sabir, M.H., Safi, S.M.Z., and Albirini, A.^[10, 47]).

3.2. Data Collection

To collect the data and assess the children's ability to use SA when narrating short stories, the children were first asked to listen to three different short stories narrated by the researcher in SA. Each participant was then asked to retell the same short stories to evaluate their understanding of the story and their ability to retell it in SA. This also allowed for observation of diglossic code-switching during the retelling of the three short stories. The selected short stories were *The*

Fox and the Rooster, *The Lying Shepherds*, and *The Rabbit and the Turtle*.

4. Results and Discussion

This section presents and discusses the findings concerning the use of SA and NA nouns and verbs, the patterns and directionality of diglossic code-switching, and observed gender differences. The analysis directly addresses the research questions and integrates statistical analysis where relevant.

In analyzing the data, it was found that the preschool children in the study demonstrated a clear ability to use SA, as evidenced by their comprehension of SA-narrated stories and their use of SA forms in retelling. Both male and female participants incorporated SA nouns and verbs into their speech. This finding answers Research Question 1, which asks whether preschool children are able to use SA, and indicates that children of this age can effectively access and utilize the formal variety in narrative contexts. However, in recounting the stories, diglossic code-switching was obvious, with individual differences in the level of switching.

To address Research Question 4 on the frequency of switching between SA and NA when using nouns and verbs, the number of SA and NA nouns and verbs was counted. **Table 1** shows the frequency of SA and NA nouns and verbs among male participants. Male participants tended to use SA nouns more often than SA verbs (24% compared with 9%), while NA verbs occurred more frequently than NA nouns (55% compared with 13%). SA nouns occurred more frequently than NA nouns (24% compared with 13%), while NA verbs were used much more frequently than SA verbs, accounting for the highest percentage in the male sample (55% compared with 9%).

Table 2 illustrates the frequency of SA and NA nouns and verbs among the female participants. Similar to the male participants, the female participants used more SA nouns than SA verbs (21% compared to 11%). Moreover, they tended to use more NA verbs than NA nouns (58% compared with 10%). SA nouns were used more frequently than NA nouns (21% compared with 10%). On the contrary, NA verbs were used more often than SA verbs (58% compared with 11%). It is worth mentioning that the female participants tended to provide more details in their storytelling, which could explain the high verb and noun counts in general.

Table 1. Frequency of SA and NA Nouns and Verbs in Male Children's Speech.

	SA		NA	
	Nouns	Verbs	Nouns	Verbs
Total	114	43	62	263
Percentage	24%	9%	13%	55%

Table 2. Frequency of SA and NA Nouns and Verbs in Female Children's Speech.

	SA		NA	
	Nouns	Verbs	Nouns	Verbs
Total	193	103	94	535
Percentage	21%	11%	10%	58%

Figure 1 shows the use of SA and NA nouns and verbs by male and female speakers. The female participants used all of the SA and NA variables at a high level of frequency: they used SA nouns, SA verbs, NA nouns, and NA verbs more often than the male participants. The females also tended to display more frequent use of SA variants than the male

participants. In particular, they frequently used SA verbs.

Based on the data illustrated above and addressing Research Question 2, it is evident that diglossic code-switching occurred among all participants during story retelling, demonstrating the children's natural use of both language varieties.

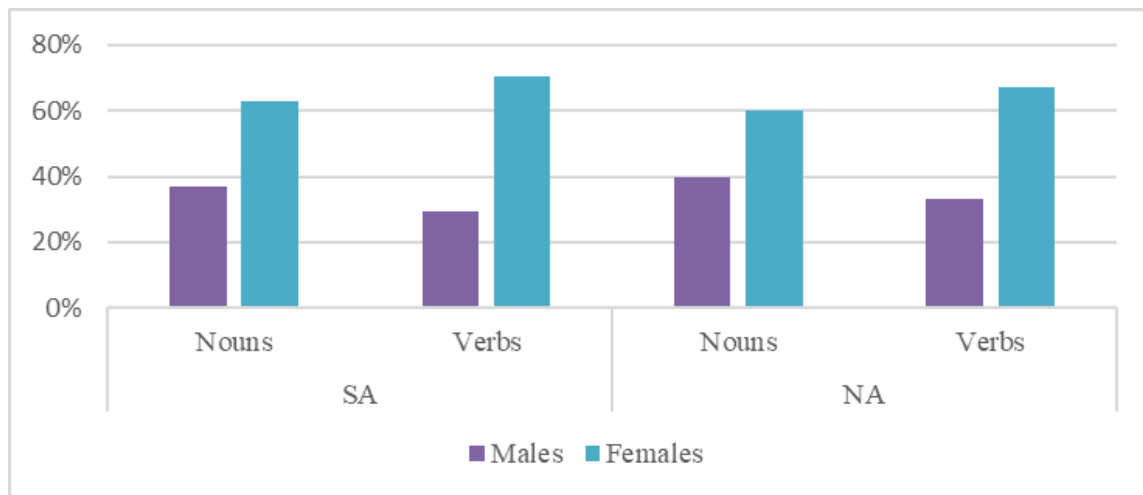


Figure 1. Use of SA and NA Nouns and Verbs by Male and Female Speakers.

In response to Research Question 3 about the direction of code-switching, the following indicates whether participants switched from an SA verb to an NA noun or vice versa. In general, the findings show evidence of switching from an SA verb to NA, although this occurred at a low level among both male and female speakers. Having a linguistic variable in SA followed by an element in CA is contrary to Mejdell's view that switching to CA immediately after an SA focal point is impermissible^[23]; in contrast, switching to elements from both SA and CA is possible when the focal

point occurs in the spoken dialect. According to Eid^[31], switching to the dialect after an SA element was accepted by the speakers in her study, but she provided no supporting evidence.

Figure 2 shows that the male participants tended to switch to SA nouns after NA verbs rather than switching to NA nouns after SA verbs (98% compared with 2%). Switching to NA nouns after SA verbs, where SA is not the dominant language, occurred a few times, as can be seen in **Figure 2**: this challenges the dominant language hypothesis.

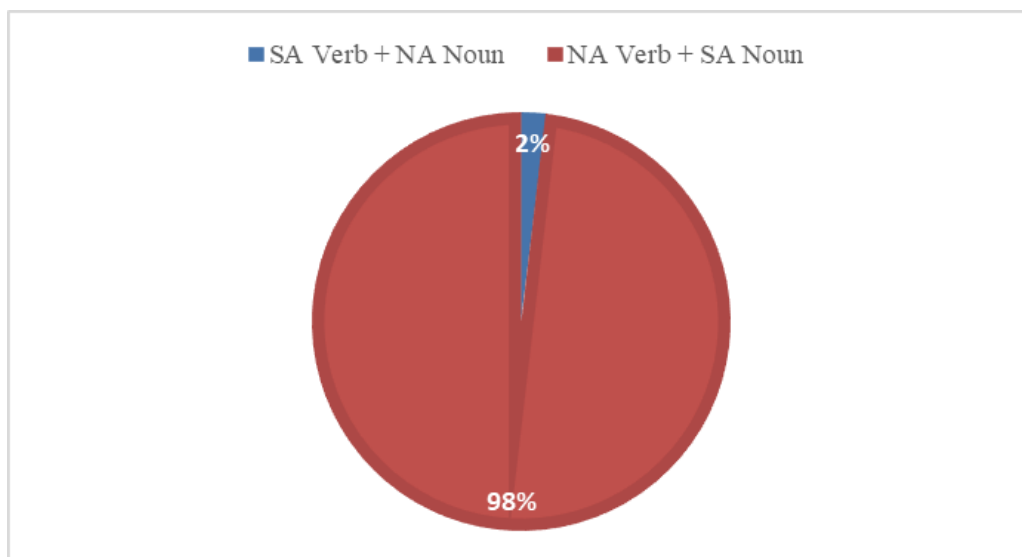


Figure 2. Direction of Male Speakers' Diglossic Code-Switching between SA and NA Verbs and Nouns.

A few examples were found of code-switching between an SA verb and NA noun, as shown in the following extract from one of the male participants:

قال الذئب
 qa:la ədði:b
 "The wolf said"

The following is an example of switching to an SA noun after an NA verb in which the NA verb *ligaw* "find" is followed by the SA noun *ði?b* "wolf":

مالقوا ذئب
 ma: ligaw ði?b
 "They didn't find a wolf."

Figure 3, which focuses on the female participants, shows both diglossic switching to SA nouns after NA verbs and switching to NA nouns after SA verbs. Similar to the male participants, the females tended to switch to SA nouns more frequently after NA verbs than to NA nouns after SA verbs (94% compared to 6%).

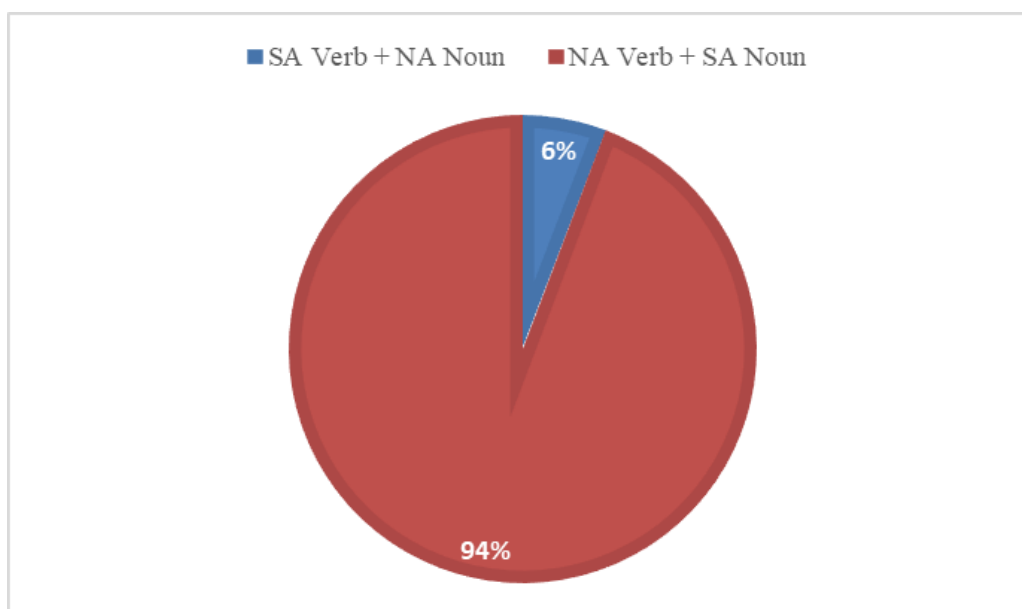


Figure 3. Direction of Female Speakers' Diglossic Code-Switching between SA and NA Verbs and Nouns.

In the following are examples of diglossic code-switching by the female participants. In the first example, the SA verb *taʔkul* “eat” is followed by the NA noun *al-fi:ra:n* “the mice.”

والقطعة لا تأكل الفيران
al-qitʔa la: taʔkul *al-fi:ra:n*
“The cat does not eat the mice.”

In the second example, the NA verb *nəsawwi* “let’s have” is followed by the SA noun *siba:q* “race.”

نسوي سباق

nəsawwi siba:q
“Let’s have a race.”

The following two figures compare the male and female participants’ direction of switching. In terms of switching from NA verbs to SA nouns, **Figure 4** shows that the male participants tended to switch after NA verbs more than the female participants did, although there was only a small difference between them. The female participants, in contrast, showed a tendency to more frequently switch to NA nouns after SA verbs than the male speakers did (see **Figure 5**).

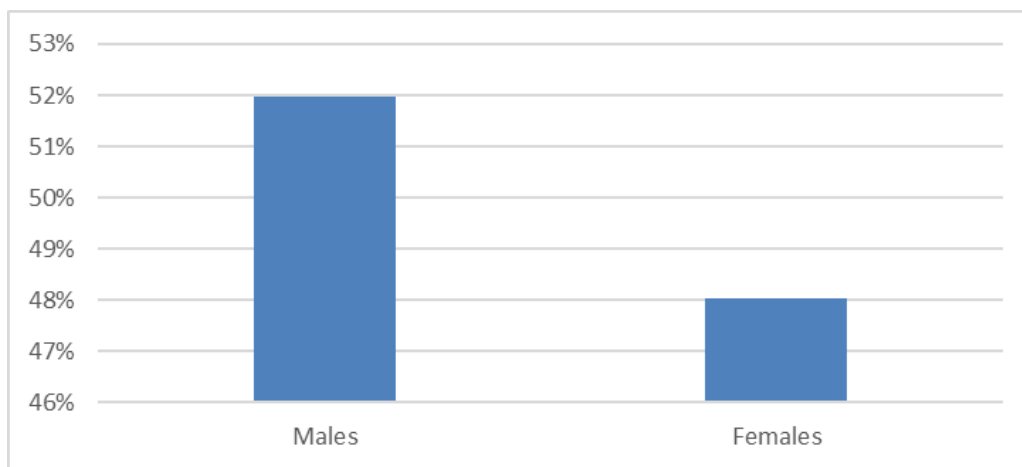


Figure 4. Code-switching from NA to SA (NA verbs and SA nouns) among Male and Female Speakers.

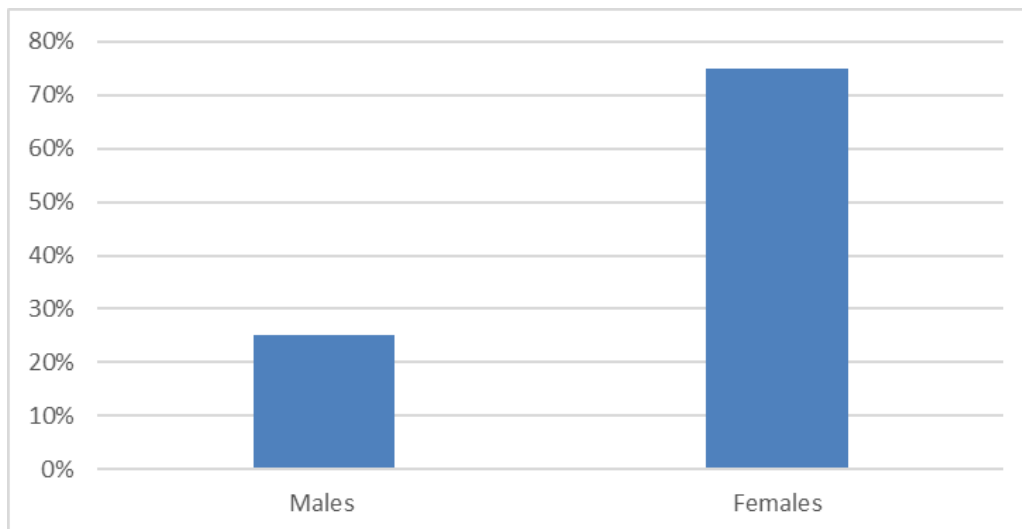


Figure 5. Code-switching from SA to NA (SA verbs and NA nouns) among Male and Female Speakers.

To address Research Question 5 on whether the male and female participants differ significantly in diglossic code-switching between SA and NA, an independent-samples t-test was performed. The results showed no statistically significant difference.

cant difference ($t(26) = 0.32, p = 0.75$). Although females produced more linguistic elements overall, this did not translate into significant gender-based differences in switching frequency.

Research Question 6 asked whether the diglossic code-switching observed follows linguistic constraints; addressing this research question, the results show that the directionality of switching observed in this study supports the linguistic constraints suggested by Eid. Children predominantly switched from NA verbal clauses to SA nouns, reinforcing the notion that NA is the dominant variety and that embedding SA elements in NA structures is the preferred pattern. This finding is consistent with the rule-governed nature of code-switching reported in previous studies^[10, 14, 34]. The rare switches from SA verbs to NA nouns further support the view that switching from SA focal points to NA elements is less natural and infrequent.

In conclusion, the preschool children showed an early ability to use SA alongside NA and engage in systematic diglossic code-switching. NA served as the dominant variety, particularly in verb use, with SA nouns frequently embedded within NA verbal clauses. The switching followed the linguistic constraints and directionality patterns previously identified in the literature, and no significant gender differences were found in switching behavior despite differences in overall language production.

5. Conclusions

The current study aimed to examine whether preschool children aged 4 to 6 years old could switch between SA and NA, considering that NA is their native spoken variety and they had limited exposure to SA as SA courses are not provided at the preschool stage. The study also sought to identify whether the children's diglossic code-switching was rule governed by focusing on the directionality constraints proposed by Eid and the dominant language hypothesis^[30–32]. It also identified differences in male and female children's code-switching. The study found that the preschool children demonstrated the ability to use SA. The male and female children both switched between SA and NA, and the diglossic code-switching was systematic. Both genders tended to switch to SA nouns after NA verbs more frequently than switching after SA verbs to NA verbs. Nevertheless, there

was some evidence of switching after SA verbs to NA nouns. It is worth noting that, to some extent, the female participants showed a tendency to use SA more frequently than the male participants, though the difference was negligible.

The current study has certain limitations that should be acknowledged. The analysis was limited to Najdi male and female preschool children aged 4 to 6 years old. The study also focused on switching between verbs and nouns in verbal clauses. Further research is needed on children's ability to use SA at the preschool stage, focusing on other linguistic constraints and parts of speech and examining gender differences. More studies are also needed on diglossic code-switching among children who speak other varieties of Arabic, as the current study was limited to children speaking NA. In addition, future studies should aim to include larger and more diverse samples to enhance the external validity of the findings.

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Institutional Review Board Statement

The research was approved by the Committee of Research Ethics, Deanship of Graduate Studies and Scientific Research, Qassim University.

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

The data that support the findings of this study are available from the author upon reasonable request.

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Conflicts of Interest

The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

References

- [1] Abu Rabia, S., 2000. Effects of Exposure to Literary Arabic on Reading Comprehension in a Diglossic Situation. *Reading and Writing*. 13, 147–157.
- [2] Mejdell, G., 2006. *Mixed Styles in Spoken Arabic in Egypt*. E.J. Brill: Leiden, Netherlands.
- [3] Albirini, A., 2016. *Modern Arabic Sociolinguistics: Diglossia, Variation, Codeswitching, Attitudes, and Identity*. Routledge: Abingdon, UK.
- [4] Miller, C., Caubet, D., 2009. Arabic Sociolinguistics in the Middle East and North Africa (MENA). In: Ball, M. (ed.). *The Routledge Handbook of Sociolinguistics Around the World*, 1st ed. Routledge: New York, NY, USA. pp. 238–256.
- [5] Haeri, N. 2000. Form and Ideology: Arabic Sociolinguistics and Beyond. *Annual Review of Anthropology*. 29, 61–87. DOI: <https://doi.org/10.1146/annurev.anthro.29.1.61>
- [6] Ibrahim, R., 2009. The Cognitive Basis of Diglossia in Arabic: Evidence from a Repetition Priming Study within and between Languages. *Psychology Research and Behaviour Management*. 2, 93–105. DOI: <https://doi.org/10.2147/PRBM.S5138>
- [7] Ferguson, C. 1959. Diglossia. *Word*. 15, 325–340.
- [8] Bassiouney, R., 2006. *Functions of Code-switching in Egypt*. Brill: Leiden, Netherlands.
- [9] Alaiyed, M., 2018. *Diglossic Code-switching between Standard Arabic and Najdi Arabic in Religious Discourse [Doctoral Thesis]*. Durham University: Durham, UK. Available from: <https://etheses.dur.ac.uk/12578/> (cited 15 Mach 2025)
- [10] Sabir, M.H., Safi, S.M.Z., 2008. Developmental Diglossia: Diglossic Switching and the Equivalence Constraint. *JKAU Arts and Humanities*. 16(2), 91–110. DOI: <http://dx.doi.org/10.4197/art.16-2.4>
- [11] Gumperz, J.J., 1982. *Discourse Strategies*. Cambridge University Press: Cambridge, UK.
- [12] Gardner-Chloros P., 2009. *Code-switching*. Cambridge University Press: Cambridge, UK.
- [13] Sayahi, L., 2014. *Diglossia and Language Contact: Language Variation and Change in North Africa*. Cambridge University Press: Cambridge, UK.
- [14] Shetewi, O., Corrigan, K.P., Khattab, G., 2024. Children's Multilectal Repertoires: Diglossic Style-shifting by Palestinian Children and Adolescents in Syria. *Languages*. 9, 341. <https://doi.org/10.3390/language9110341>
- [15] Albirini, A., 2011. The Sociolinguistic Functions of Codeswitching between Standard Arabic and Dialectal Arabic. *Language in Society*. 40, 537–562. DOI: <https://doi.org/10.1017/S0047404511000674>
- [16] Soliman, A., 2008. *The Changing Role of Arabic in Religious Discourse: A Sociolinguistic Study of Egyptian Arabic [Doctoral Thesis]*. Indiana University of Pennsylvania: Indiana, PA, USA.
- [17] Chakrani, B., 2015. *Arabic Interdialectal Encounters: Investigating the Influence of Attitudes on Language Accommodation*. *Language & Communication*. 41, 17–27. DOI: <https://doi.org/10.1016/j.langcom.2014.10.006>
- [18] Holes, C., 1993. The Use of Variation: A Study of the Political Speeches of Gamal Abd al Nasir. In: Eid, M., Holes, C. (eds.). *Perspectives on Arabic Linguistics: Papers from the Annual Symposium on Arabic Linguistics*, V. John Benjamins: Amsterdam, Netherlands. pp. 13–45.
- [19] Abu-Melhim, A., 2014. Intra-lingual Code Alternation in Arabic: The Conversational Impact of Diglossia. *Theory and Practice in Language Studies*. 4(5), 891–902. DOI: <http://dx.doi.org/10.4304/tpsls.4.5.891-902>
- [20] Walters, K., 1996. Diglossia, Linguistic Variation, and Language Change in Arabic. In: Eid, M. (ed.). *Perspectives on Arabic Linguistics: Current Issues in Linguistic Theory*, VIII. John Benjamins: Amsterdam, Netherlands. pp. 157–197. DOI: <https://doi.org/10.1075/cilt.134.12wal>
- [21] Tsiplakou, S., 2009. Code-switching and Code-mixing between Related Varieties: Establishing the Blueprint. *The International Journal of the Humanities*. 6(12), 50–65. DOI: <https://doi.org/10.18848/1447-9508/CGP/v06i12/42576>
- [22] Muysken, P., 2000. *Bilingual Speech: A Typology of Code-mixing*. Cambridge University Press: Cambridge, UK.
- [23] Mejdell, G., 2006. Code-switching. In: Versteegh, K., Eid, M., Elgibali, A., Woidich, M., Zaborski, A. (eds.). *Encyclopedia of Arabic Language and Linguistics*, Vol. I: A–Ed. Brill: Leiden, Netherlands. pp. 259–269.
- [24] Auer, P., 1995. The Pragmatics of Code-switching: A Sequential Approach. In: Milroy, L., Muysken, P. (eds.). *One Speaker, Two Languages: Cross-disciplinary Perspectives on Code-switching*. Cambridge University Press: Cambridge, UK. pp. 115–135.
- [25] Auer, P., 1998. From Code-switching via Language Mixing to Fused Lects: Toward a Dynamic Typology of Bilingual Speech. *Interaction and Linguistic Structures*. 6, 1–27. DOI: <https://doi.org/10.18848/1447-9508/CGP/v06i12/42576>
- [26] Davies, E., Bentahila, A., Owens, J. 2013. Codeswitching and Related Issues Involving Arabic. In: Owens, J. (ed.). *The Oxford Handbook of Arabic Linguistics*.

- Oxford University Press: Oxford, UK. pp. 336–347.
- [27] Sharma, D., 2018. Style Dominance: Attention, Audience, and the ‘Real Me’. *Language in Society*. 47, 1–31. DOI: <https://doi.org/10.1017/S0047404517000835>
- [28] Andersen E., 1992. *Speaking with Style: The Sociolinguistic Skills of Children*. Routledge: London, UK.
- [29] Palva, H., 1969. Notes on Classicization in Modern Colloquial Arabic. *Studia Orientalia*. XL, 3.
- [30] Eid, M., 1982. The Non-randomness of Diglossic Variation. *Glossa*. 16, 54–84.
- [31] Eid, M., 1988. Principles for Code-switching between Standard and Egyptian Arabic. *Al-‘Arabiyya*. 21, 51–79.
- [32] Petersen, J., 1988. Word-internal Code-switching Constraints in a Bilingual Child’s Grammar. *Linguistics*. 26, 479–493.
- [33] Poplack, S., Wheeler, S., Westwood, A. 1989. Distinguishing Language Contact Phenomena: Evidence from Finnish-English Bilingualism. *World Englishes*. 8(3), 389–406. DOI: <https://doi.org/10.1111/j.1467-971x.1989.tb00677.x>
- [34] Manel, M., 2020. Diglossic Switching by Preschool Children. *Revue des Sciences Humaines*. 30(5), 387–403.
- [35] Trudgill, P., 1983. *On Dialect: Social and Geographical Perspectives*. Blackwell: Oxford, UK.
- [36] Bassiouney, R., 2009. *Arabic Sociolinguistics*. Edinburgh University Press: Edinburgh, UK.
- [37] Trudgill, P., 1972. Sex, Covert Prestige, and Linguistic Change in the Urban British Dialect of Norwich. *Language in Society*. 1(2), 179–195. DOI: <https://doi.org/10.1017/S0047404500000488>
- [38] Holmes, J., Meyerhoff, M. (eds.). 2003. *The Handbook of Language and Gender*. Blackwell: Oxford, UK.
- [39] Romaine, S. 2003. Variation in Language and Gender. In: Holmes, J., Meyerhoff, M. (eds.). *The Handbook of Language and Gender*. Blackwell: Oxford, UK. pp. 98–118. DOI: <https://doi.org/10.1002/9780470756942.ch4>
- [40] Salami, L., 1991. We Speak Code-mix: Some Perceptions of the Yoruba Language in Ile-Ife, Nigeria. *Journal of Asian and African Studies*. 1, 35–48.
- [41] Labov, W., 1982. Building on Empirical Foundations. In: Lehmann W., Malkiel, Y. (eds.). *Perspectives on Historical Linguistics (Current Issues in Linguistic Theory)*. John Benjamin Publishers: Philadelphia, PA, USA. pp. 17–92.
- [42] Abdel-Jawad, H., 1981. *Phonological and Social Variation in Arabic in Amman*[Doctoral Thesis]. University of Pennsylvania: Philadelphia, PA, USA.
- [43] Bakir, M., 1986. Sex Differences in the Approximation to Standard Arabic: A Case Study. *Anthropological Linguistics*. 28, 3–9. <https://www.jstor.org/stable/30027941>
- [44] Sallam, A., 1980. Phonological Variation in Educated Spoken Arabic: A Study of the Uvular and Related Plosive Types. *Bulletin of the School of Oriental and African Studies*. 43(1), 77–100. DOI: <https://doi.org/10.1017/S0041977X00110559>
- [45] Daher, J., 1998. Gender in Linguistic Variation: The Variable (q) in Damascus Arabic. In: Benmamoun, E., Eid, M., Haeri, N. (eds.). *Perspectives on Arabic Linguistics XI*. Benjamins: Amsterdam, Netherlands.. pp. 183–208.
- [46] Miller, C. 2005. Between Accommodation and Resistance: Upper Egyptian Migrants in Cairo. *Linguistics*. 43, 903–956.
- [47] Albirini, A., Benmamoun, E., Chakrani, B. 2013. Gender and Number Agreement in the Oral Production of Arabic Heritage Speakers. *Bilingualism: Language and Cognition*. 16(1), 1–18. DOI: <https://doi.org/10.1017/S1366728912000132>