

## Turkish Definiteness: Is it a vulnerable phenomenon for heritage speakers?

In Turkish, if a noun phrase (NP) in the direct object position is marked with the accusative case marker *-(y)I*, then the NP is definite (*Kitab-ı aldım* ‘I took the book’). However, if the NP in the direct object position is preceded by the word *bir* ‘one/a(n)’, then the NP is indefinite (*Bir kitap aldım* ‘I took a/one book’). Indefinite NPs with the accusative case marker *-(y)I* are specific and refer to entities that were mentioned in the preceding discourse (*Ben bir kitab-ı aldım* ‘I took one of the books’) (Göksel & Kerslake, 2005). Previous studies with Turkish heritage speakers (HS) have shown that they use the indefinite marker *bir* more frequently than the monolingually-raised Turkish native speakers (MS) (Backus et al., 2011; Felser & Arslan, 2019). These results indicate that definiteness is a vulnerable phenomenon for Turkish HS, as they have to integrate different language modules, i.e., morphosyntax and pragmatics (Uygun, 2023).

The current study investigates to what extent HS are sensitive to morphosyntactic and pragmatic constraints on the correct use of Turkish definiteness. We tested 49 MS in İstanbul, Türkiye, and 32 Turkish HS living in the USA via an acceptability judgment task on a 5-point scale. 23 HS were late bilinguals (LBHS), and 9 HS were early bilinguals (EBHS). By manipulating bareness (bare [B] vs. non-bare [NB]), plurality (singular [SG] vs. plural [PL] NP), and definiteness (definite specific [DS] vs. indefinite non-specific [INS] vs. indefinite specific [IS]), 24 experimental sentence sets in twelve different conditions were created (see Table 1). The scalar acceptability judgement task was implemented as a web-based questionnaire.

The dependent measure was the rating scores of our experimental sentences. Linear mixed-effects regression models with crossed random effects for items and participants were used to analyze rating data. The models included the participant-level variable *Group* (MS vs. LBHS vs. EBHS) and item-level variables *Bareness* (bare vs. non-bare), *Plurality* (plural vs. singular), and *Definiteness* (definite specific vs. indefinite specific vs. indefinite non-specific) as fixed effects together with random slopes for item and participant. The main interest was in obtaining significant group differences and interactions involving the factor group.

The results of rating data (see Table 2) reveal no significant group differences between the MS and LBHS groups. However, we observed many significant interactions with the factor group not only between MS and EBHS but also between LBHS and EBHS. These results clearly indicate that the EBHS group faces problems with the integration of external interfaces (i.e., morphosyntax and pragmatics), and they were not affected by the manipulation of *bareness*, *plurality*, and *definiteness* in the same way as the MS and LBHS groups. The MS and LBHS groups contrasted these manipulations more strongly than the EBHS group and demonstrated a similar rating pattern. This similarity in their ratings might be related to the late exposure of the dominant language (English) in the LBHS group because they completed the acquisition of their heritage language (Turkish) before moving to the USA. Conversely, the obtained group differences with the EBHS group can be related to the quantity and quality of input the EBHS group received while acquiring their heritage language because they were exposed to the dominant language much earlier than the LBHS group (Polinsky & Scontras, 2020). As a result, the no group difference between the MS and LBHS indicates that acquiring the L1 fully with good quantity and quality of L1 input prevents the vulnerability in the heritage language to a certain extent.

Table 1: Experimental sentences with their context sentences

	<b>Bare Singular/Plural NP</b>	<b>Non-Bare Singular/Plural NP</b>
<b>CS</b>	<i>Masanın üzerinde <b>kitap/kitaplar</b> vardı.</i> There was/were a book/books on the table.	<i>Masanın üzerinde <b>bir kitap/beş kitap</b> vardı.</i> There was/were a book/five books on the table.
<b>DS</b>	<i>Canı çok sıkılan Ayşe <b>kitabı</b> okudu.</i> Ayşe, who was very bored, read the book.	<i>Canı çok sıkılan Ayşe <b>kitabı</b> okudu.</i> Ayşe, who was very bored, read the book.
<b>INS</b>	<i>Canı çok sıkılan Ayşe <b>bir kitap</b> okudu.</i> Ayşe, who was very bored, read a book.	<i>Canı çok sıkılan Ayşe <b>bir kitap</b> okudu.</i> Ayşe, who was very bored, read a book.
<b>IS</b>	<i>Canı çok sıkılan Ayşe <b>bir kitabı</b> okudu.</i> Ayşe, who was very bored, read one of the books.	<i>Canı çok sıkılan Ayşe <b>bir kitabı</b> okudu.</i> Ayşe, who was very bored, read one of the books.

CS: Context sentence; DS: Definite Specific; INS: Indefinite Non-Specific; IS: Indefinite Specific

Table 2. Mean rating scores and SDs (in parenthesis) for each condition and group

<b>Condition</b>	<b>MS</b>	<b>LBHS</b>	<b>EBHS</b>
B-PL-DS	3.94 (1.15)	3.63 (1.29)	4.11 (1.02)
B-PL-INS	4.40 (0.82)	4.13 (1.15)	4.44 (0.86)
B-PL-IS	4.39 (1.06)	4.41 (1.09)	4.06 (1.16)
B-SG-DS	4.69 (0.78)	4.65 (0.60)	4.72 (0.46)
B-SG-INS	3.31 (1.39)	2.95 (1.37)	3.38 (1.08)
B-SG-IS	3.32 (1.30)	3.20 (1.33)	3.39 (1.33)
NB-PL-DS	3.39 (1.27)	3.20 (1.29)	4.28 (1.13)
NB-PL-INS	4.08 (1.10)	3.76 (1.18)	4.11 (1.08)
NB-PL-IS	4.55 (0.72)	4.43 (0.98)	4.44 (0.78)
NB-SG-DS	4.61 (0.83)	4.46 (1.03)	4.11 (1.02)
NB-SG-INS	3.29 (1.31)	3.26 (1.20)	3.27 (1.27)
NB-SG-IS	3.16 (1.23)	3.11 (1.16)	3.83 (0.86)

B: Bare; NB: Non-Bare; PL: Plural; SG: Singular; DS: Definite Specific; INS: Indefinite Non-Specific; IS: Indefinite Specific

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