

Gender perception varies with consonant sonority in Urdu nonce names

Hassan Khan, Yoonjung Kang & Dave Kush

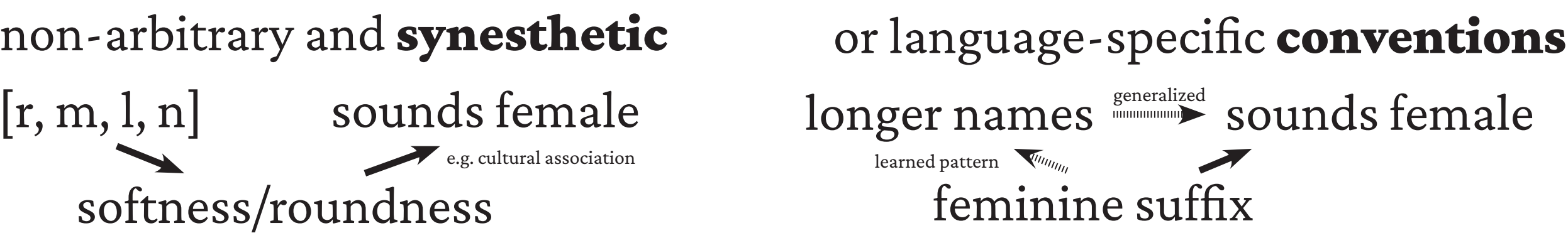
Background

Names can use different strategies to **signal gender**.^[1]

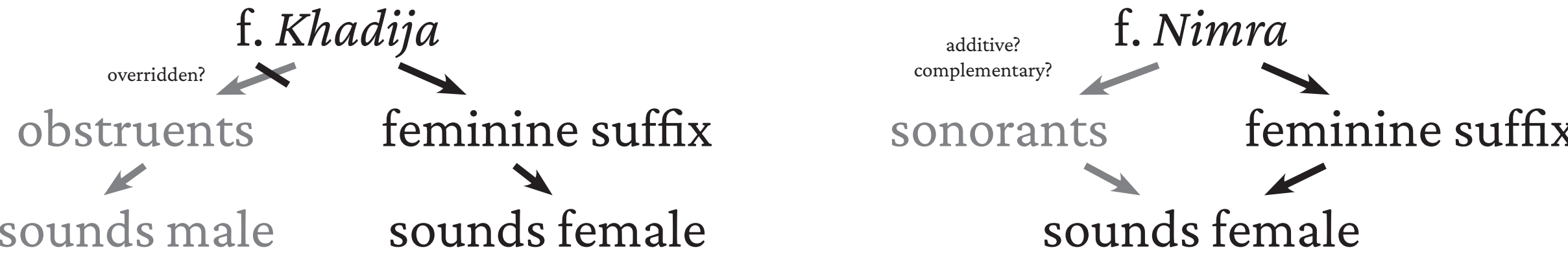
learned conventional genders
m. *Kashif* / f. *Zainab*

explicit gender morphology
m. *Muneeb* → f. *Muneeba*

One strategy is **sound-symbolic cues**, which may be:^[2,3]

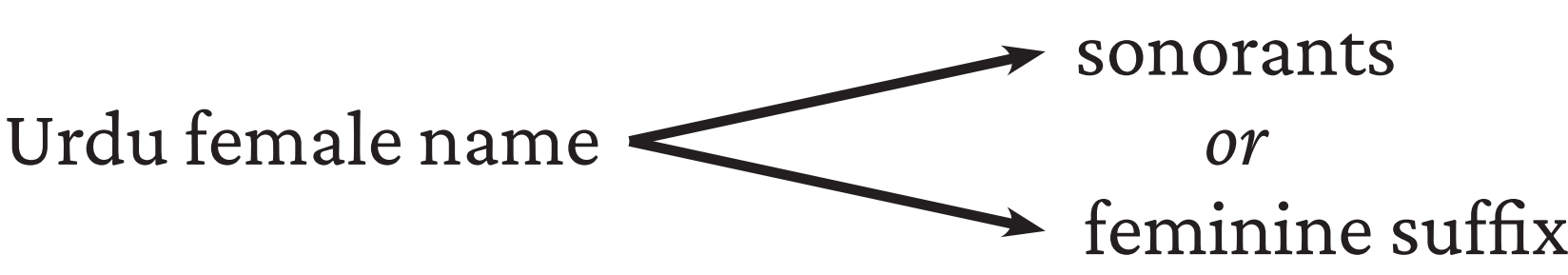


Different cues **interact in complex ways**, performing the same function through different (sometimes complementary) means.

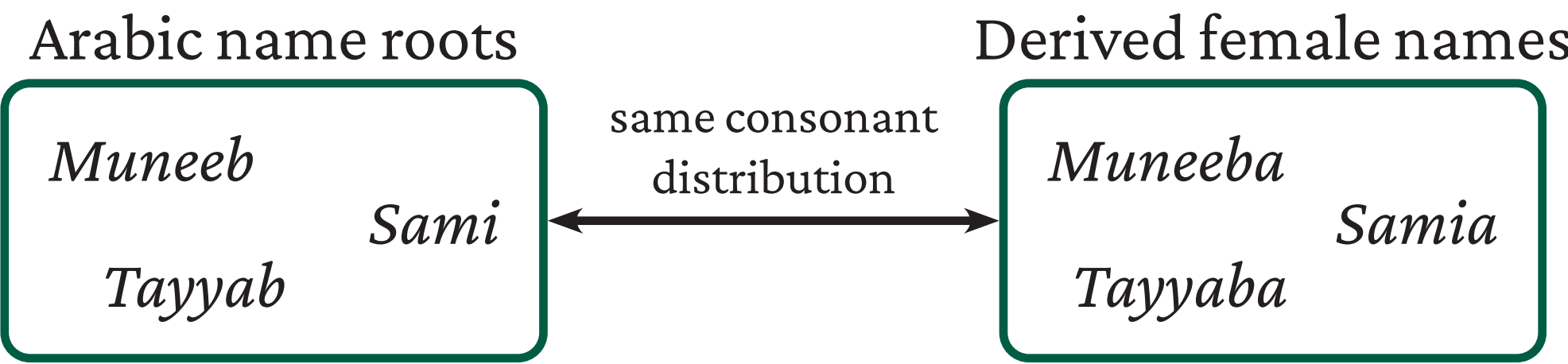


Current Study

Urdu female names often have a **feminine suffix** [-ɑ:]. They also contain **more sonorants**, except when there is a suffix — suggesting **complementary effects**.^[4]



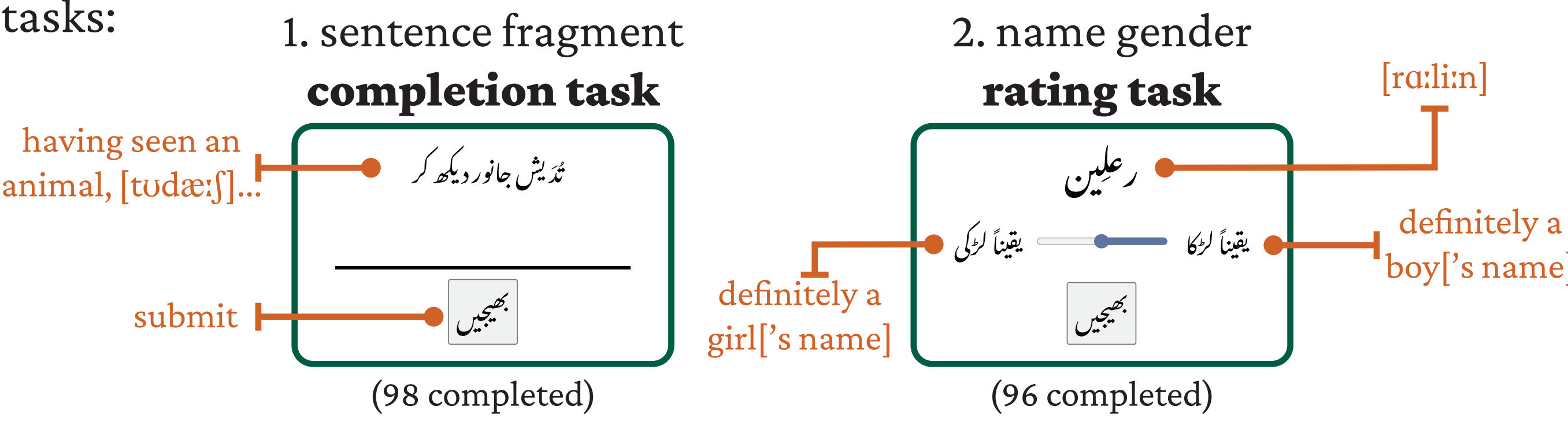
This could reflect active competition in speakers' minds, but could also result from **historical circumstances**.



To test this, we see how Urdu speakers perceive the gender of **nonce names** **varying by consonant sonority and suffix**.

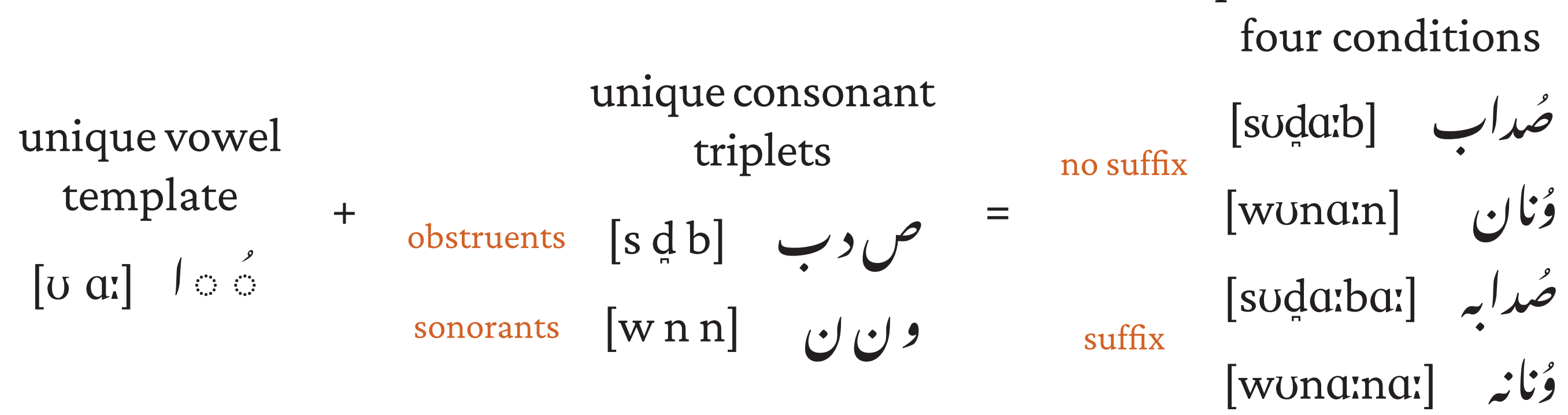
Methods

99 Urdu speakers in Pakistan participated in an online experiment with two tasks:



The completion task uses Urdu's **obligatory gender agreement** to implicitly measure perceived gender (cf. [5]); explicit ratings are standard (e.g. [6]).

We created 16 sets of nonce names verified with two native speakers.

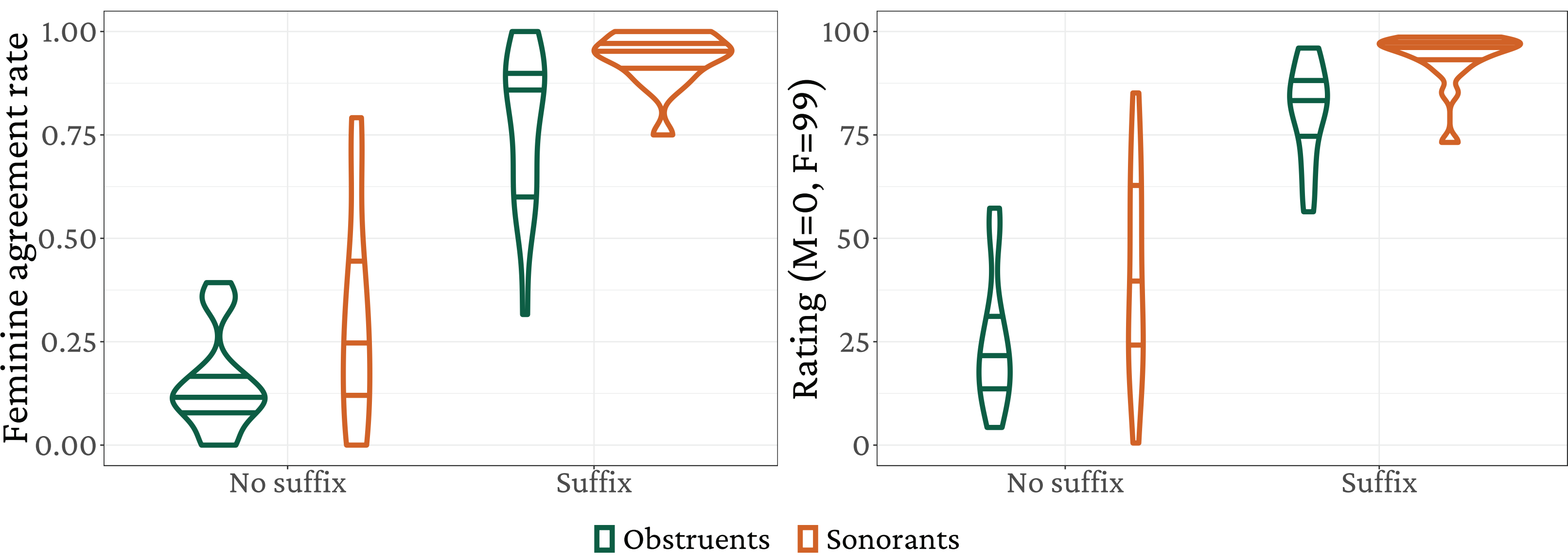


Participants saw one item from each set in a Latin square, once in the completion task and once in the rating task.

Real name distractors were balanced for sonority and did not contain the feminine suffix. Distractor sentence fragments blocked subject gender agreement.

Results were analyzed with multilevel logistic (for agreements) and linear (for ratings) regressions with sonority, suffix, and their interaction as predictors, random intercepts by participant and name, and random slopes for sonority and suffix by participant.

Urdu speakers perceive sonorants as more feminine than obstruents, even with a feminine suffix.

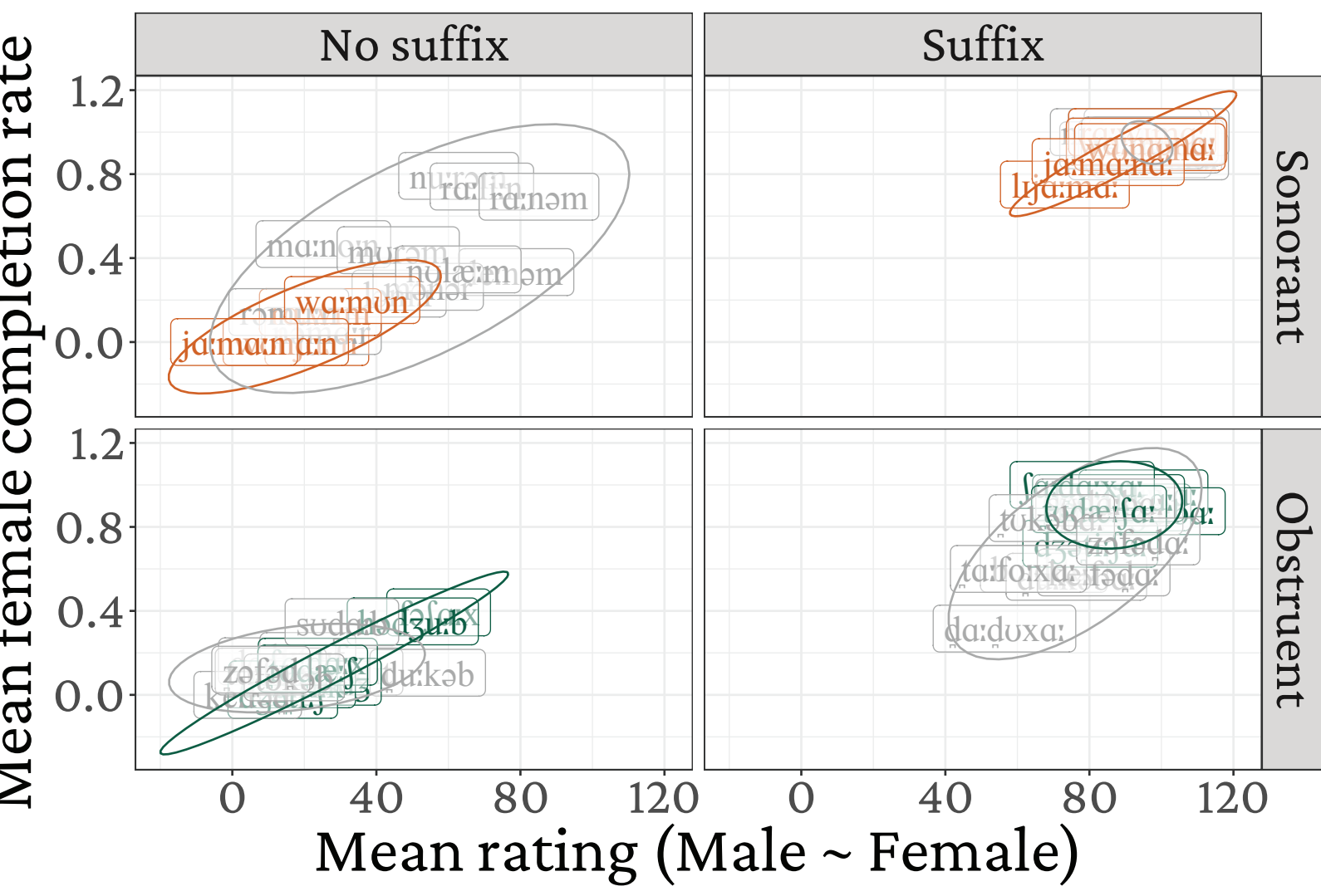


Distributions of agreement rates (left) and average ratings (right) for nonce name stimuli, by suffix and sonority condition.

Participants gave **more feminine agreements** to names with sonorants and with suffixes, with **no interaction**.

They also **rated them as more feminine**, again with **no interaction**.

The effect of the suffix was stronger than that of consonant sonority, as expected.



consonants.^[4] Our experimental data seems to support this, at least among names with suffixes. Glides also seem to pattern differently from other sonorants, acting as less of a feminine cue. It is not clear why we should observe this, especially considering palatal [j] and labial [w] might both be expected to lean feminine.

These consonant effects emerge when the two cues (sonority and suffix) disagree and names are more ambiguous.

We can see that for individual stimuli, responses from the two tasks are generally in agreement.

Some limited evidence suggests Urdu female names have more palatal

Discussion

We observed an **active association between consonant sonority and gender** among Urdu speakers.

We found **no evidence for competition** between these sound-symbolic and morphological gender cues. The interaction in existing names may result from **female suffixed names derived from male roots**, which would not have more sonorants.

Treating gender as a single dimension may limit what we can observe, especially since our results are at ceiling. For example, “fully acceptable for women” is not equivalent to “fully unacceptable for men.”

References: [1] Alford, R. 1988. Naming and identity: A cross-cultural study of personal naming practices. [2] Kang, Y. 2021. Phonology of gender in personal names. [3] Ackermann, T & C. Zimmer. 2021. The sound of gender—Correlations of name phonology and gender across languages. [4] Khan, H. & Y. Kang. Under revision. Gendered sound symbolism in Urdu names interacts with gender morphology. [5] Cassidy, K. et al. 1999. Inferring gender from name phonology. [6] Mohsin, N. et al. 2019. Gender phonology of Urdu first names.

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