Parallel implicit and explicit processing mechanisms in statistical language learning

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Introduction

Statistical learning refers to the *discovery of patterns in the input*

The learning of word boundaries can occur through an **implicit** computation of **transitional probabilities**, which are statistically predictive relationships between syllables (Saffran et al., 1996)

Statistical learning is considered a **domain-general** resource (Kirkham et al., 2002), although **domain-specific interference effects** have not been investigated in detail

Method

Participants

Procedure

Artificial Language Stimuli

Six trisyllabic "words" generated from 12 CV syllables
Unsegemented language stream: Only cue to word boundaries were the **transitional probabilities** between syllables

putibu bupada pidadi babupu dutaba tutibu

Explicit Working Memory Task

Implicit Learning Test Phase

Results

Note: "#$%&' (%)*+,!-&./$0!1.($+&%2!')2'3'2/+,,4!*.!1.)*&.,0!/0')-!$,+))%2!0'($,%!1.)*&+0*05!!

bolded values are $p < .05$