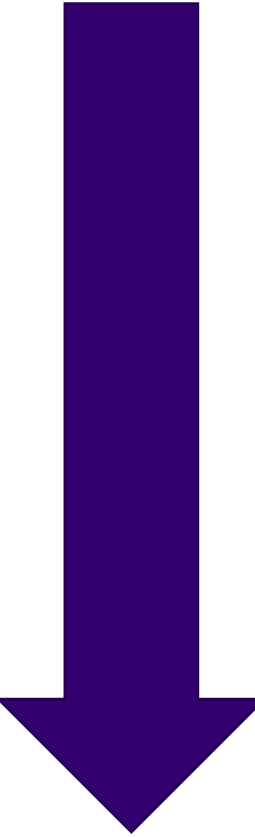




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PHONOLOGICAL SIMILARITY EFFECT IN SERBIAN LANGUAGE: CHECKING RETRIEVAL CUES HYPOTHESIS

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INTRODUCTION

PHONOLOGICAL SIMILARITY EFFECT

- With increasing the phonological similarity of letters in a sequence, immediate serial recall gets worse
- The same effect occurs with the sequences comprised of both similar and dissimilar letters

RETRIEVAL CUES HYPOTHESIS

- Similar letters do not have discriminative retrieval cues
 - e.g. FĐRŠMČ
- Mistakes should occur while recalling similar and not dissimilar letters

HYPOTHESIS CHECK BY BADDELEY

- Different combinations of the sequences (S-similar letters; D-dissimilar letters)
 - SSSSSS, DDDDDD, SDSDS, DSDSDS, SSSDDD, DDDSSS
 - e.g. ŠFĐMČJ (SDSDSD)
- One sequence is comprised of six letters
- Successive presentation
- The mistakes occur while recalling similar and not dissimilar letters
- This experiment didn't put the retrieval cues on a direct test
- The results could be easily explained by alternative hypotheses

AIMS

WHAT AND HOW?

- Checking the hypothesis more directly
- Strengthening the tie between retrieval cue and target letter by presenting them in pairs as well
 - e.g. F-Đ-R-Š-M-Č
 - e.g. FĐ-RŠ-MČ
- There should be fewer mistakes just in DSDSDS situation while presenting in pairs
- S cannot be retrieval cue for D

WANT A QUICK GLANCE?

- Phonologically similar letters are harder to recall, probably due to the indiscriminative retrieval cues for similar letters
- Baddeley checked this hypothesis, although indirectly
- The more direct way would be strengthening the tie between the retrieval cue and the target letter by presenting letters in pairs
- That's exactly what we did in one of the first experiments regarding this effect in Serbian language
- The results confirmed the hypothesis

AIMS

1. Replicating the structure of Baddeley's results



2. Is recall better while presenting DSDSDS in pairs?
3. Can S be a retrieval cue for D?

METHODS

DESIGN AND PARTICIPANTS

- Repeated design 6x2
- IV1 – type of sequence
 - SSSSSS, DDDDDD, SDSDS, DSDSDS, SSSDDD, DDDSSS
- IV2 – type of presentation
 - successively, in pairs
- DV – number of errors
- n=20

STIMULI

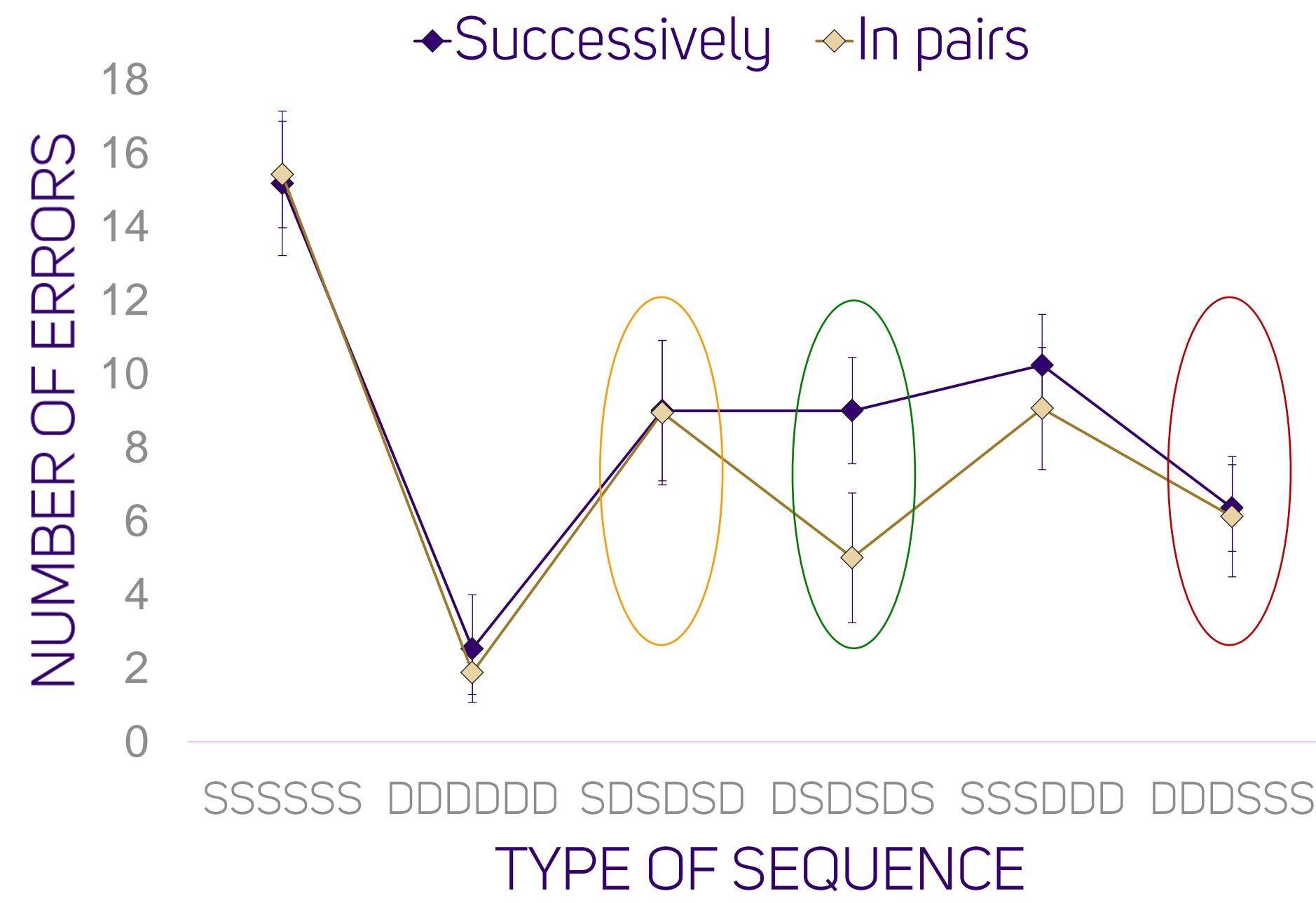
- Set of similar letters
 - Š, Č, Đ, Ć, Ž, Dž
- Set of dissimilar letters
 - F, C, K, R, M, J
- Sequences created by randomising letters from these sets
- Letters presented in cyrillic

PROCEDURE

1. Instructions
 - guessing instead of leaving the paper blank
2. Randomized presentation of sequences
 - 4.5s per sequence
3. Sign for the beginning of the recall
4. Writing the letters on paper

RESULTS

- The sequence type ✓
 - $F(5, 80) = 77.774, p = .001$
- The type of presentation ✓
 - $F(1, 16) = 8.032, p = .012$
- The interaction ✓
 - $F(5, 80) = 3.009, p = .014$



- The structure of Baddeley's results was not replicated
 - DDDSSS different from all of the other sequence
- Fewer mistakes in DSDSDS while presenting letters in pairs
- No difference in recall between presenting letters of sequence SDSDS successively or in pairs

DISCUSSION

- The retrieval cues hypothesis was checked more directly
- The structure of Baddeley's results was not entirely replicated
 - loss of letters while trying to guess
 - changing the instructions