Same - Different Discrimination Using Word Minimal Pairs: Instructions for Use

All the materials in this task are monosyllabic real words with a CVC structure and are designed for use in conjunction with nonword minimal pairs [1]. By comparing results on this task with that using nonword minimal pairs, one can look firstly for any impairment in phoneme perception and secondly for whether impairment is reduced by lexical information. It is also useful for testing patients who have difficulty in dealing conceptually with nonword stimuli.

Stimulus pairs are minimally different according to voice, manner or place of articulation. Differences occur either in initial or final positions of pairs or in pairs that are metathetically related. Half of the 'same' pairs are high in word frequency (Mean = 182.06; Std. Dev. = 201.95) and half are low in word frequency (Mean = 6.44; Std Dev. =5.95). All the words are monomorphemic.

Special Points:

We have found that with this task it is often difficult to get across what the patient has to do. The presenter should take time to ensure that the patient really understands the requirements of the task. We have found it useful to explain what is meant by 'same' and 'different' by modelling the task visually either by using pictures or written words (see example form [2], page 2).

As first and second halves of this test are matched, it may only be necessary to present half.

Descriptive Statistics (for 24 control subjects):

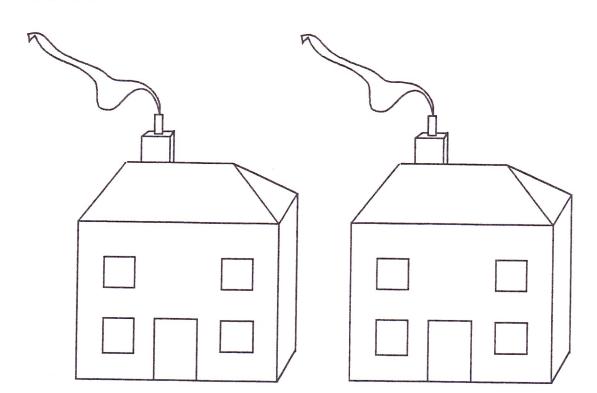
Same Judgements:

Mean = 35.54 Std. Dev. = 0.78

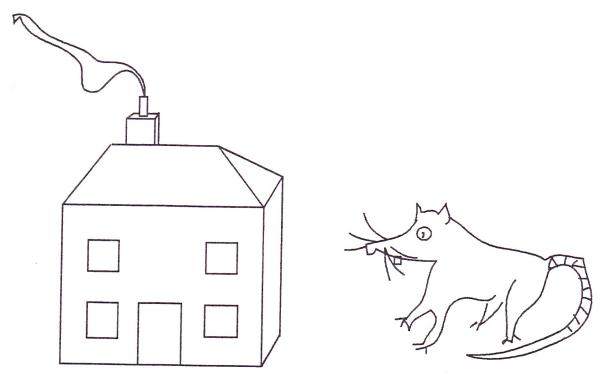
Different Judgements

Mean = 34.83 Std. Dev. = 2.58

Suggestions for Where to go next: Note that as the patient simply has to make a "yes" or "no" decision, one would expect him or her to obtain a score of 50% by chance alone. If the patient performs outside the normal range, check on hearing and the effect of lip-reading. Compare performance on Nonword Minimal Pair Discrimination [1], which must be carried out without the aid of word-specific information. Other auditory processing tasks (eg. Auditory Lexical Decision [5]; Word Minimal Pairs requiring Picture Selection (4)) can show the extent to which lexical and semantic information contribute to auditory processing abilities.



SAME



DIFFERENT

Same - Different Discrimination Using Word Minimal Pairs: Presenter's & Marking Form

Name:	Date:

Instructions to Subject: [Present words with a 1 second interval with flat intonation. Prevent lipreading.] I'm going to say two words to you. Listen carefully: 'house-house'. I said the same word twice. Listen again: 'house-mouse'. This time the words were different. That's what this task is all about. Say "yes" if the two words are the same, "no" if they're different.

Marking Instructions: Tick correct answer in stimulus columns. Type' columns indicate differences between pairs: where the difference occurs (Initial (I), final (F) or metathetic (M)) and what the difference is (voice (v), manner (m) or place (p)). 'Freq' column can be used to see whether 'same' decisions are influenced by word frequency, high (H) or low (L).

No. Word pair Freq Type No. Word pair Freq Type 1 tack-cat M p 37 lip-nip I m 2 bed-bet F v 38 need-need H same 3 coat-coat H same 39 deb-bed M p M p 4 might-night I p 40 feed-feed H same 5 tip-tip H same 41 rung-rung L same 6 cup-cut F p 42 bat-mat I m I m 7 face-face H same 43 tone-tome F p 8 tick-tick L same 44 pick-pig F v 9 name-name H same 45 safe-safe L same 10 cub-cub L same 46 dean-need M m M m 11 kneel-lean
2bed-betF v38need-needHsame3coat-coatHsame39deb-bedM p4might-nightI p40feed-feedHsame5tip-tipHsame41rung-rungLsame6cup-cutF p42bat-matI m7face-faceHsame43tone-tomeF p8tick-tickLsame44pick-pigF v9name-nameHsame45safe-safeLsame10cub-cubLsame46dean-needM m11kneel-leanM m47pit-pitLsame12pole-bowlI v48tone-toneHsame13bead-beadLsame49pick-pickLsame14main-maidF m50gown-gownLsame
3 coat-coat H same 39 deb-bed M p 4 might-night I p 40 feed-feed H same 5 tip-tip H same 41 rung-rung L same 6 cup-cut F p 42 bat-mat I m I m 7 face-face H same 43 tone-tome F p 8 tick-tick L same 44 pick-pig F v 9 name-name H same 45 safe-safe L same 10 cub-cub L same 46 dean-need M m M M 11 kneel-lean M m 47 pit-pit L same 12 pole-bowl I v 48 tone-tone H same 13 bead-bead L same 49 pick-pick L same 14
4might-nightI p40feed-feedHsame5tip-tipHsame41rung-rungLsame6cup-cutF p42bat-matI m7face-faceHsame43tone-tomeF p8tick-tickLsame44pick-pigF v9name-nameHsame45safe-safeLsame10cub-cubLsame46dean-needM m11kneel-leanM m47pit-pitLsame12pole-bowlI v48tone-toneHsame13bead-beadLsame49pick-pickLsame14main-maidF m50gown-gownLsame
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6 cup-cut F p 42 bat-mat I m 7 face-face H same 43 tone-tome F p 8 tick-tick L same 44 pick-pig F v 9 name-name H same 45 safe-safe L same 10 cub-cub L same 46 dean-need M m 11 kneel-lean M m 47 pit-pit L same 12 pole-bowl I v 48 tone-tone H same 13 bead-bead L same 49 pick-pick L same 14 main-maid F m 50 gown-gown L same
7 face-face H same 43 tone-tome F p 8 tick-tick L same 44 pick-pig F v 9 name-name H same 45 safe-safe L same 10 cub-cub L same 46 dean-need M m 11 kneel-lean M m 47 pit-pit L same 12 pole-bowl I v 48 tone-tone H same 13 bead-bead L same 49 pick-pick L same 14 main-maid F m 50 gown-gown L same
8 tick-tick L same 44 pick-pig F v 9 name-name H same 45 safe-safe L same 10 cub-cub L same 46 dean-need M m 11 kneel-lean M m 47 pit-pit L same 12 pole-bowl I v 48 tone-tone H same 13 bead-bead L same 49 pick-pick L same 14 main-maid F m 50 gown-gown L same
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12pole-bowlI v48tone-toneHsame13bead-beadLsame49pick-pickLsame14main-maidF m50gown-gownLsame
13bead-beadLsame49pick-pickLsame14main-maidF m50gown-gownLsame
14 main-maid F m 50 gown-gown L same
15 bud-dub M.n. 51 kit-tick M.n.
115 bad dab
16 rope-rope L same 52 life-life H same
17 tail-sail Im 53 gut-cut Iv
18 cap-cab Fv 54 roam-robe Fm
19 zeal-zeal L same 55 don-don L same
20 goal-goal H same 56 pail-pain F m
21 beam-beam H same 57 dote-toad M v
22 goal-coal I v 58 night-night H same
23 tuck-tuck L same 59 nail-lane M m
24 fan-fang F p 60 seed-feed I p
25 debt-Ted Mv 61 back-bat Fp
26 road-road H same 62 leaf-leave F v
27 deck-neck I m 63 bug-bug L same
28 hiss-hiss L same 64 lane-lane H same
29 tome-tome L same 65 back-back H same
30 tape-tape H same 66 fawn-fawn L same
31 cap-pack M p 67 bill-pill I v
32 van-fan I v 68 meat-meat H same
33 god-god H same 69 pat-tap M p
34 Ted-Ted L same 70 bomb-bomb H same
35 write-rice F m 71 moan-moan L same
36 don-nod M m 72 tail-dale I v
SAME /36 INITIAL /12 voice /12 LOW FREQ /18
DIFFERENT /36 FINAL /12 manner /12 HIGH FREQ /18
METATHETIC /12 place /12