VNeST: who, what, when, why and why not?

Adult Language EBP group 2015
Julia Murphy and Kate Makin
Who are we?

• 15+ active members working with adults across NSW (Sydney, Blue Mountains & Illawarra/Shoalhaven areas)

• Members work across acute, rehabilitation and community settings

• Stable group membership with a number of long-term members as well as more recently graduated clinicians

• Academic link: Professor Lyndsey Nickels from Macquarie University
What was our Clinical Question?

• Does VNeST improve sentence production in clients with aphasia?

• Does treatment using VNeST show generalization effects to untreated items and connected speech?

• Is VNeST most suitable for clients with mild, moderate or severe aphasia?
What were our articles?


**What is VNeST?**

**Verb Network Strengthening Treatment**

- A semantically based treatment that targets lexical retrieval of meaningful words in sentences.

- Each treatment step has a purpose based on the theoretical foundation.

- The nouns that are related to verbs in proposed networks are called thematic roles.

- Research has shown that verbs and their related thematic roles are neurally co-activated so that the agents and patients facilitate the activation of the verbs and vice versa.

- VNeST requires participants to produce diverse scenarios related to trained verbs which may spread activation to untrained verbs and networks.
What is VNeST?
Verb Network Strengthening Treatment

• **Intensive** - 2 hour sessions, 2-3 sessions/week, up to 11 weeks

• **Steps**
  1. Generate agents & patients for chosen verbs with cues/help
  2. Read responses aloud
  3. Expand one schema with *Wh*- questions
  4. Make semantic judgments about sentences that the SP reads aloud
  5. Produce target verbs independently
  6. Repeat step 1 without cues

• **No pictures**
What is VNeST?
Verb Network Strengthening Treatment

<table>
<thead>
<tr>
<th>Agents</th>
<th>Verb</th>
<th>Patients</th>
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</thead>
<tbody>
<tr>
<td>Dad</td>
<td></td>
<td>Boat</td>
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<td>Chauffeur</td>
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<td>Paramedic</td>
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<td>Wife</td>
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When might you use VNeST?

• In the **chronic** setting (i.e., more than a year post stroke)
• When you are able to provide **intensity** of therapy (face to face or by telehealth)

• It would be worth considering when you have a client:
  – Has verb and noun naming impairment at single word and sentence level
  – Who enjoys structured therapy
  – Who has mild-moderate aphasia
  – With any aphasia type, including Wernicke’s aphasia
Why would you use VNeST?

• To improve single word and sentence level spoken output

Because:

– improvements may generalise to untreated words and connected speech for some people

– VNeST has shown merit for all aphasia types, including Wernickes aphasia

– Despite the trend that it is most suited to clients with mild-moderate aphasia, clients with severe aphasia also showed improvement
Why would you not use VNeST?

Because:

– improvements may not be maintained long-term
– It is unclear if VNeST achieves better outcomes than other therapy approaches
– A reasonable understanding of the technique is required (may limit involvement of AHA and carers)
– When trialing with clients, members found it time consuming and challenging

Further research is needed as the 5 articles reviewed were authored by the same researcher (Lisa Edmonds)
Clinical Bottom Line
Does VNeST improve sentence production in clients with aphasia?

It may, for some clients with chronic aphasia.
Does treatment using VNeST show generalisation effects to untreated items and connected speech?

Yes, most clients showed generalisation. However, improvements were often not maintained.
Is VNeST most suitable for clients with mild, moderate or severe aphasia?

There is a trend that it is most effective for clients with mild to moderate aphasia.
Adult Language group

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• All meetings held at Concord Hospital from 2.30-3.30pm and are followed by ANCIG

• Likely meeting dates for 2016 (TBC)
  – Thursday 18th February
  – Thursday 21st April
  – Thursday 16th June
  – Thursday 18th August
  – Thursday 20th October
Any questions?

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